SOUTHEASTERN BIOLOGY

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ASB 75TH ANNUAL MEETING

APRIL 2-5, 2014

Converse College
Spartanburg Community College
Spartanburg Methodist College
University of South Carolina Upstate
Wofford College
Spartanburg, South Carolina

See Page 1 and Consult Website
http://www.sebiologists.org

College Entrance

The Official Publication of
The Association of Southeastern Biologists, Inc.
http://www.sebiologists.org

Featured Institutions

Converse College
Spartanburg Community College
Spartanburg Methodist College
University of South Carolina Upstate
Wofford College

75th Annual Meeting of the Association of Southeastern Biologists
April 2-5, 2014, Spartanburg, SC
Spartanburg Marriott & Convention Center

This four-day event brings together approximately 1000 biologists from across the southeastern United States. The meeting features a distinguished plenary speaker, special symposia, field trips, oral and poster presentations, workshops, networking and social events, and more.

The Annual Meeting provides you with the exclusive opportunity to showcase your products and/or services to this large and important audience of faculty, students, researchers, conservation workers, military and government personnel, and business professionals with a common interest in biological issues. Interests are diverse, and range from genetics and molecular biology, to physiology and population biology, to community and ecosystem ecology and systematics.

About ASB: The Association of Southeastern Biologists (ASB) was established in 1937 by biologists concerned with the quality of biological research in the southeastern United States. Today, ASB is the largest regional biology association in the country, and is committed to the advancement of biology as a science by the promotion of science education, research, and the application of scientific knowledge to human problems.

ASB Web Site: Many thanks to Dr. Ashley Morris, Middle Tennessee State University ASB's web site. Please visit our exciting and interactive web site www.sebiologists.org. Many new features have been added, register on-line for our Annual Meeting, join or renew your membership, view photos, inquire about career opportunities and more.

Location of the 2014 Annual Meeting

Spartanburg Marriott & Convention Center

Centrally located in downtown Spartanburg South Carolina this stunning, new hotel is located within walking distance of restaurants, entertainment, quaint shops, and historic Spartanburg walking tours. Beautiful rooms, terrific restaurants, hallmark Marriott service and easy access to Greenville-Spartanburg International Airport make this Spartanburg SC hotel ideal for an ASB meeting. The Spartanburg Marriott Hotel and Conference Center offers 30,000 sq ft of flexible, state-of-art meeting and event space that includes 27 event rooms, numerous breakout rooms, 3 boardrooms, and the 11,340 sq ft Spartanburg Marriott Heritage Ballroom which can seat up to 1,500. ASB has completely booked the Hotel and Conference Center for the three days of the meeting, so we will have exclusive use of these excellent facilities.

Welcome to Spartanburg, South Carolina

Spartanburg is nestled in the foothills of the Blue Ridge Mountains, between Atlanta, GA and Charlotte, NC and less than an hour from Asheville, NC. We are a great location for your next vacation and a perfect spot if you are planning a convention or meeting.

We have put together itineraries for your family and co-workers that will make your visit stress-free. Whether they are interested in history, art, shopping or the outdoors, Spartanburg has something for them. Plus there is always a festival or special event happening to keep things lively. At the end of the day you'll have a choice between four-star hotels, cozy bed & breakfasts, and everything in between.

Revolutionary? Why yes, we are.

You will see this theme repeated on this website and on your visit. Why? Because we were born of the American Revolution. The Spartan regiment rose up from the South Carolina backcountry to fight for independence. Fierce battles fought on our soil were a turning point in our nation's struggle for freedom.

Today our lives revolve around our rich cultural offerings, our extensive educational opportunities, our musical heritage, our racing legacy, our food and the simple abundance of our stunning landscape. We are at the crossroads of all that is dynamic about the modern South as we continue to evolve and change the course of history. We are Spartanburg, South Carolina. Revolutionary.

http://www.visitspartanburg.com/

CONVERSE COLLEGE

Our Mission and History

Mission

The primary mission of Converse College, founded in 1889, is the liberal education of undergraduate women in a residential setting. Converse reaffirms the founder's original conviction that a small undergraduate residential college of the liberal arts is a uniquely powerful environment for developing the talents of women. As a community of scholars, where students and faculty pursue excellence and collaborate in the search for truth, Converse develops in students scholarly excellence, personal honor, confidence, and skills to be life-long learners. The College draws much of its character from its Christian heritage and welcomes students of all faiths. Converse expands its mission by offering graduate degrees and other programs for women and men. Ultimately, graduates embody the qualities of a Converse education as they assume roles of leadership, service, and citizenship.

History

Since the college's founding, graduates have used their Converse experience as launching pads for successful careers and active citizenship. Among Converse alumnae are a Pulitzer Prize winner, a renowned heart researcher, a Texas Supreme Court Justice, a prominent civil rights attorney, Broadway performers, the deputy crew commander for Titan IV Rocket launches at Cape Canaveral, and the first female circuit court judge in South Carolina.

Although the doors of Converse opened October 1, 1890, the first step towards the founding of the college was taken in 1889 when a prominent attorney assembled a group of Spartanburg citizens to discuss the project. Among the 13 men was Dexter Edgar Converse, a native of Vermont who had settled in Spartanburg before the Civil War and had become a successful pioneer in the cotton mill industry.

Mr. Converse was especially interested in establishing a college for women because his daughter, Marie, was approaching college age and he wanted her to have every possible educational advantage. His initial and subsequent contributions to the cause were so valuable that the college was given his name.

Initially, the college was operated as a stock company and Mr. Converse headed the first board of directors, comprised entirely of Spartanburg citizens. They elected the Rev.

Benjamin F. Wilson as the first president. The first faculty roster was comprised of sixteen members and the student body numbered one hundred sixty-eight.

On January 2, 1892, the main building was destroyed by fire, but was immediately reconstructed and enlarged. The work of the college hardly suffered interruption. In 1896, by the voluntary act of the stockholders, Converse College was incorporated under the laws of the state of South Carolina and a self-perpetuating board of trustees was established. This meant that Converse was converted into a permanent gift to the cause of higher education for women.

Beginning in the 1900s, Converse matured into one of the leading colleges for women in the South. Academic requirements were strengthened, the ablest teachers supplemented the faculty and new buildings were constructed. It was during this period that the college's The School of Music received a national rating as a professional school of music. Converse became a charter member of the National Association of Schools of Music, which is recognized by the U.S. Department of Education as the accrediting agency for music curricula.

In 1964 Converse introduced graduate programs, including the Master of Art in Teaching (MAT) program, the first degree of its kind in South Carolina. The graduate program would later become the School of Education and Graduate Studies and offer a wide range of degrees in fields such as music, education, the liberal arts, and marriage and family therapy.

In 1983 the college introduced Converse II to fit the schedules and ambitions of adult women, whether they are a few semesters shy of a bachelor's degree or a freshman taking college-level courses for the first time.

In 2003, the college completed the most successful capital campaign in its history with $82.5 million in private gifts. The campaign led to the establishment of the Nisbet Honors Program, the Chapman Study Abroad Experience endowment, and an endowment to fund faculty initiatives for innovative teaching and scholarly achievement; renovation of residence halls and the Montgomery Student Center; and construction of The Rose Physical Activity Complex, the Justine V. R. "Nita" Milliken Addition of Milliken Fine Arts Building and Phifer Science Hall.

Momentum continues today as Converse focuses on providing distinct educational experiences that enable creativity and develop the adaptive capacity necessary for students to succeed in the ever-changing world.

- Converse Model Programs (Arab League, NATO, and UN) are national leaders having defeated such institutions as Harvard, UC–Berkley, Northeastern, Ohio State, and all three U.S. military academies. Converse is home to the Southeast Region Model Arab League competition, headquarters of the Carolinas Committee on U.S.-Arab Relations, and helped establish and run a high school Model Arab League program in Amman, Jordan.
- The Daniels Center for Leadership and Service is a partnership between academic affairs and student affairs to provide leadership development training and opportunities to learn, serve and lead on campus and in the community.
- In 2006, Converse became the first women's college to attain the prestigious All-Steinway School distinction.
- In 2007, Converse and Clemson University joined forces to increase the number of women entering science fields through a new dual degree program in engineering
- A member of Conference Carolinas, Converse competes in NCAA Division II - the highest level of any women's college.
- The curriculum supports more than 30 majors including South Carolina's only Master's in gifted education program, only low-residency MFA in creative writing and first Bachelor of Fine Arts in creative and professional writing, and the Upstate's first undergraduate music therapy degree program.

Converse College is committed to developing adaptable individuals for the 21st Century who are equipped with the character, knowledge, skills and perspective to transform the world around them.

Spartanburg Community College Profile

The Spartanburg County Technical Education Center first opened in the fall of 1963. During its first decade, the school was accredited by the Southern Association of Colleges (SACS) and in 1969 a second classroom building was constructed. In 1974, in recognition of the school's expanding academic curriculum, the name was changed to Spartanburg Technical College. As the college continued to grow, satellite locations were opened to accommodate students in the three-county service area. In 2006, the college changed its name to Spartanburg Community College, becoming the first community college in South Carolina. Today the college operates a 104-acre central campus that is a recognized arboretum with nine academic and physical plant facilities, three campuses in the towns of Duncan, Gaffney and Union and soon a downtown campus with one academic facility.

Vision: To change the lives and build the futures of our students and to be a catalyst for economic development through innovation, collaboration and excellence in educational programs and services.

Mission: Spartanburg Community College (SCC) provides affordable access to high-quality technical, transfer and lifelong professional and personal development programs in a teaching and learning environment that prepares students for success. The College is a key community partner in advancing the Upstate's economy.

Description: Spartanburg Community College is a state-supported two-year technical and community college offering certificate, diploma and associate degree programs in the Arts & Sciences, business technology, health & human services, engineering and industrial technology fields. The College currently serves the counties of Spartanburg, Cherokee and Union in South Carolina.

Faculty: SCC has a team of skilled, dedicated faculty with the majority having completed postgraduate work from outstanding national, regional and local colleges and universities. Many have years of hands-on experience in real-world settings. What sets SCC's faculty apart, however, is their dedication to teaching. They provide an unsurpassed educational experience, giving students the academic and technical skills necessary for success on the job and in future educational endeavors.

Locations: Spartanburg Community College currently maintains four locations:
- Central Campus in Spartanburg
- Downtown Campus in downtown Spartanburg
- Cherokee County Campus in Gaffney
- Tyger River Campus in Duncan
- Union County Advanced Technology Center in Union

Spartanburg Methodist College

History

Spartanburg Methodist College was founded as **Textile Industrial Institute** on September 4, 1911 by Dr. David English Camak, a visionary Methodist minister. At its founding as a work-study cooperative, TII served young adults working in area textile mills by offering high school level courses in preparation for advanced education or employment. In this first cooperative education program in the country, students worked a week and then took classes for a week. This arrangement enabled the school to provide resources for education and for life.

In 1927, the first two years of college-level work were added to the curriculum to provide graduates with an associate degree in liberal arts for transfer to senior level colleges. The continued relationship between TII and local business and industry led to the development of associate degrees that prepared students for immediate employment. In 1940, the high school classes were dropped from the TII curriculum.

In 1942, Textile Industrial Institute became **Spartanburg Junior College** and for the next twenty-five years focused its efforts on providing associate degrees designed for transfer into a wide variety of bachelor degree programs.

Beginning in 1965, the College began a cycle of growth during which over three-fourths of the present campus buildings were erected or renovated, the curriculum was broadened and strengthened, student enrollment doubled and new expertise was added through faculty growth and development. In 1974, Spartanburg Junior College became **Spartanburg Methodist College.** Then, as is now, SMC's mission is to transform lives in a values-oriented, student-centered atmosphere in the Christian tradition that encourages academic excellence, intellectual exploration, social awareness, and character development within the liberal arts tradition.

Since its founding, Spartanburg Methodist College has been affiliated with the mission work of the United Methodist Church and its forbearer, the Methodist Episcopal Church, South. The relationship between the College and the church has continued across the years through the General Board of Global Ministries and the Board of Global Ministries of the South Carolina Annual Conference. The College's name attests to the pride the institution's trustees, faculty, staff, and student body take in working and studying at a college based on the traditional values of the church and the United States of America.

Today, Spartanburg Methodist College is South Carolina's only private, residential college exclusively for freshmen and sophomore students and one of only four colleges in SC affiliated with the United Methodist Church. The College, which sits on a 110-acre campus with 20 buildings, serves a highly diverse student body from several states, as well as from various countries around the world. Dr. Colleen Perry Keith has served as the College's seventh president since July 1, 2009.

Spartanburg Methodist College seeks to serve the educational needs of its student body by enabling each student to meet the challenges of a technologically based future. SMC offers a variety of educational programs to suit both the needs of the traditional college student and of the non-traditional working adult. The College offers Associates degrees in Arts, Business, Criminal Justice, Fine Arts, Religious Studies and Science; an evening Paralegal Certificate Program; 15 intercollegiate sports and dozens of student leadership opportunities.

Spartanburg Methodist College, with a fully-accredited, rigorous academic program and a well-credentialed faculty and staff, has gone from a school that educates students for the textile industry to a College that educates students for a knowledge economy ... and we do it well. In August of 2013, SMC's enrollment included 453 LIFE Scholars, representing an impressive 56% of the student body!

Spartanburg Methodist College, founded in 1911, is proud of its heritage of providing "the opportunity **to be** your best and the inspiration **to do** great things."

SMC historian, Dr. Kathy Cann, estimates that this picture was taken in approximately 1920. She believes that the students are members of one of two literary "societies" on campus at that time. She was able to identify one student—second from left on the next to last row as Alfred Daley Wilbur. Dr. Cann shared that the college had oratorical contests and assumes that the winning club received the trophy which is proudly held by one of the students.

THE UNIVERSITY OF SOUTH CAROLINA UPSTATE

The History of USC Upstate

The history of the University of South Carolina Upstate is a chronicle of remarkable development. In 1967, the university was founded in response to efforts undertaken by G.B. Hodge, M.D., together with fellow members of the Spartanburg County Commission on Higher Education and a remarkably strong founding faculty, primarily to avert a serious health care labor shortage crisis when Spartanburg General Hospital announced plans to eliminate its diploma program for registered nurses. A citizen's committee investigated the situation and ultimately requested that Spartanburg be included in the University of South Carolina system. The Spartanburg Regional Campus, as it was first known, opened its doors in the fall of 1967 to 177 students on the first floor of the Spartanburg General Hospital nursing residence.

Enrollment continued to increase, which resulted in the school becoming a four-year university in 1975 and being renamed the University of South Carolina Spartanburg (USCS). During the next 20 years, the campus began to take physical shape with the construction of additional academic buildings. Enrollment continued to grow and degree offerings were expanded.

In the 1990s, a metropolitan mission was developed for the institution and a 10-year strategic master plan for the campus was implemented. The University's numerous partnerships with public and private corporations and other educational institutions, coupled with the mission to offer baccalaureate education to the citizens of the Upstate of South Carolina, led to a name change. On June 30, 2004, with the USC Board of Trustees approval, USCS changed its name to the University of South Carolina Upstate (USC Upstate).

The Makings of a Metropolitan University

Now in its 46th year, USC Upstate continues striving toward its vision to become one of the Southeast's leading "metropolitan" universities. ... a university which acknowledges as its fundamental reason for being its relationship to its surrounding cities, their connecting corridors and expanding populations. It aims to be recognized nationally among its peer metropolitan institutions for its excellence in education and commitment to its students, for its involvement in the Upstate, for its operational and managerial effectiveness, for its civility and

common purpose, and for the clarity and integrity of its mission. As a senior comprehensive public institution of the University of South Carolina, the University's primary responsibilities are to offer baccalaureate education to the citizens of the Upstate of South Carolina and to offer selected master's degrees in response to regional demand.

Since its founding, USC Upstate has grown from a small, two-year campus into one of the leading metropolitan universities in the Southeast. This growth has been a direct response to the needs of the Upstate—a tradition that began with the University's creation. The University has expanded well beyond nursing to include 40 bachelor's and master's programs in the liberal arts, sciences, business, information systems, teacher education and nursing.

In 1994, the University moved to the graduate level, now offering master's degree programs in elementary education, early childhood education, special education: visual impairment, Informatics and Nursing (coming in 2014).

Developing a Significant Presence in Greenville

From its inception, the University has bound its fortunes to one of the fastest growing regions in the nation, the I-85 corridor connecting Atlanta and Charlotte. USC Upstate – a metropolitan university – serves the cities of Spartanburg and Greenville and their surrounding communities, home to a million people and the highest per capita international investment of any counties in the nation. The focus is on the higher education interests of Upstate South Carolina and partnerships with its important enterprises.

Along with the enormous growth on the Spartanburg campus, USC Upstate has developed a significant presence in Greenville at the University Center of Greenville (UCG), a nonprofit consortium of seven higher education institutions dedicated to increasing access to educational opportunities for the citizens of the Greater Greenville Metropolitan Area of South Carolina.

USC Upstate is the largest provider of undergraduate academic programs at the University Center of Greenville, generating over 70 percent of the Center's baccalaureate enrollment. The University's critical partner in this growth is Greenville Technical College (GTC). Both institutions aim to provide opportunities for students to complete technical or associate degrees at GTC, and then move seamlessly into junior-through-senior bachelor's level degree completion programs in numerous related disciplines at USC Upstate.

USC Upstate Greenville Campus currently offers the junior and senior years of study for 11 undergraduate degree programs and 1 graduate degree program, each taught by highly qualified and dedicated faculty.

The degree programs are as follows:

- Bachelor of Science in Information Management and Systems (includes on-site and online courses)
- Bachelor of Science in Nursing (RN to BSN online and onsite and the last two years of the four-year BSN program)
- Bachelor of Science in Business Administration (with concentrations in accounting and general business administration)
- Bachelor of Science in Engineering Technology Management
- Bachelor of Arts in Communications (with a concentration in mass media)
- Bachelor of Arts or Bachelor of Science in Interdisciplinary Studies
- Bachelor of Arts in Early Childhood Education
- Bachelor of Arts in Elementary Education
- Bachelor of Arts in Middle Level Education
- Bachelor of Arts in Secondary Education
- Bachelor of Science in Special Education/Learning Disabilities
- Master of Science in Informatics (includes on-site and online courses)

Serving the Upstate

With both a thriving campus in Spartanburg and an escalating presence in Greenville, the University is "The University of South Carolina in the Upstate," supporting not only its own academic programs, but partnering with USC in hosting future programs that USC may place in the I-85 corridor. While continuing to grow in Spartanburg , the University has delivered more and more of its degree programs within the framework of the University Center of Greenville. The name change occurred to position the University to develop the breadth of partnerships in Greenville it has and will continue to develop in Spartanburg and elsewhere across the I-85 corridor.

Among the fastest growing universities in South Carolina, USC Upstate is a diverse and dynamic community of 5,500 students from across the world. With 36 states and 51 countries represented among the student body, the University reflects the Upstate's international character.

WOFFORD COLLEGE

A History of Wofford, 1854-2010

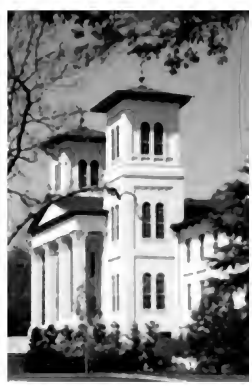
On July 4, 1851, the future Methodist Bishop William Wightman came to a beautiful site on a high ridge overlooking the tiny courthouse village of Spartanburg, South Carolina. As more than 4,000 people looked on, he made the keynote address while local Masons laid the cornerstone for Wofford College. A distinguished professor and journalist as well as a clergyman, Wightman stressed that the new institution would pattern itself after neither the South's then-elitist public universities nor the narrowly sectarian colleges sponsored by some denominations. Instead, he argued, "It is impossible to conceive of greater benefits—to the individual or to society—than those embraced in the gift of a liberal education, combining moral principle ... with the enlightened and cultivated understanding which is the product of thorough scholarship."

Wofford College later experienced both good times and hard times, but it stands more than 150 years later as one of a handful of pre-Civil War American colleges operating continuously and successfully on its original campus. It has offered carefully selected students a respected academic program, tempered with concern for the individual. It has respected the virtues of continuity and heritage while responding with energy, optimism and excitement to the challenges of a changing world.

Like many of America's philanthropic institutions, Wofford College came about because of the vision and generosity of an individual. Benjamin Wofford was born in rural Spartanburg County on October 19, 1780. Sometime during the great frontier revivals of the early 19th century, he joined the Methodist church and served as a circuit rider (itinerant preacher) for several years. In 1807, he married Anna Todd and settled down on her family's prosperous farm on the Tyger River. From this happy but childless marriage, which ended with Anna's death in 1835, Mr. Wofford acquired the beginnings of his fortune. At the age of 56, the widower married a much younger woman from Virginia, Maria Barron. They moved to a home on Spartanburg's courthouse square, where he could concentrate on investments in finance and manufacturing. It was there that Benjamin Wofford died on December 2, 1850, leaving a bequest of $100,000 to "establish a college of literary, classical and scientific education to be located in my native district and to be under the control and management of

the Methodist Church of my native state." It proved to be one of the largest financial contributions made to American higher education prior to the Civil War. Mr. Wofford's will was approved in solemn form on March 14, 1851, and the college charter from the South Carolina General Assembly is dated December 16, 1851.

Trustees quickly acquired the necessary land and retained one of the South's leading architects, Edward C. Jones of Charleston, to lay out the campus. Although landscaping plans were never fully developed in the 19th century, sketches exist to show that the early trustees envisioned a formal network of pathways, lawns and gardens that would have left an impression quite similar to the present National Historic District. The original structures included a president's home (demolished early in the 20th century); four faculty homes (still in use today for various purposes); and the magnificent Main Building. Known as simply as "The College" for many years, the latter structure remains one of the nation's outstanding examples of "Italianate" or "Tuscan Villa" architecture.



Construction finally began in the summer of 1852 under the supervision of Ephraim Clayton of Asheville, NC. Skilled African-American carpenters executed uniquely beautiful woodwork, including a pulpit and pews for the chapel. The college bell arrived from the Meneely Foundry in West Troy, New York, and, from the west tower of "Old Main," it continues to sing out as the "voice of Wofford." The exterior of the building today is true to the original design, but the interior has been modernized and renovated three times — in the early 1900s, in the 1960s, and in 2007.

In the autumn of 1854, three faculty members and seven students took up their work. Admission was selective. Prospective students were tested on their knowledge of English, arithmetic, algebra and geography. They were also expected to demonstrate a knowledge of Latin and Greek classics, including Cicero, Caesar, the Aeneid, and Xenophon's Anabasis. The first Wofford degree was awarded in 1856 to Samuel Dibble, a future United States Congressman.

After an administration that was highly successful both educationally and financially, President Wightman resigned in 1859 to launch yet another Methodist college, Birmingham-Southern in Alabama. He was replaced by the Rev. Albert M. Shipp, a respected scholar who was immediately confronted with a devastating Civil War. Many students and young alumni, including two sons of faculty members, were killed in the great Virginia battles of 1862. Then, as Sherman approached Atlanta in 1864, the trustees invested their endowment funds in soon-to-be-worthless Confederate bonds and securities. (The college still has them in its vault.) The situation was

really quite hopeless, but the physical plant remained intact and the professors remained at their posts. Given the disarray of education at all levels, South Carolina Methodists saw the mission of their colleges as more important than ever if a “New South” was to be created.

Shipp remained at the college through the Reconstruction period, and his emancipated slave Tobias Hartwell played a key role in Spartanburg’s emerging African-American community. Nevertheless, Wofford’s history from the end of the Civil War until 1900 was dominated by one man — James H. Carlisle. A member of the original faculty and then president of the college from 1875 through 1902, he initially taught mathematics and astronomy, but his real strength was his ability to develop alumni of character, one student at a time. Three generations of graduates remembered individual visits with President Carlisle in his campus home, now occupied by the dean of students. To them, he was “The Doctor;” “Wofford’s spiritual endowment; “ “the most distinguished South Carolinian of his day.”

The curriculum gradually evolved during Carlisle’s administration; for example, he shocked everyone by delivering his first presidential commencement address in English rather than Latin. Nevertheless, many lasting traditions of Wofford life date from his administration. Four surviving chapters of national social fraternities (Kappa Alpha, 1869; Sigma Alpha Epsilon, 1885; Kappa Sigma, 1891; and Pi Kappa Alpha, 1894) were chartered on the campus. Such organizations owned or rented houses in the village, because in those days, professors lived in college housing while students expected to make their own arrangements for room and board. To meet some of their needs, two students from the North Carolina mountains, Zach and Zeb Whiteside, opened and operated Wofford’s first dining hall in Main Building. Although music was not part of the curriculum, there was an active glee club. Yankee soldiers in Spartanburg during Reconstruction apparently introduced college students to baseball, and Wofford and Furman University played South Carolina’s first intercollegiate football game in 1889. That same year, a group of students organized one of the South’s earliest literary magazines, The Journal. At commencements throughout the period, graduates sang the hymn, “From All That Dwell Below the Skies,” and received a Bible signed by faculty members.

In 1895, delegates from 10 of the leading higher education institutions across the Southeast met in Atlanta to form the Southern Association of Colleges

and Schools. The organization was conceived by Vanderbilt's Chancellor James H. Kirkland (Wofford Class of 1877), who hoped to challenge peer campuses to attain national standards of academic excellence. Trinity College in Durham, NC, which later emerged as Duke University under the presidential leadership of Wofford alumni John C. Kilgo and William Preston Few, also sent delegates. Wofford was represented by two of its outstanding young faculty members, A.G. "Knotty" Rembert (class of 1884) and Henry Nelson Snyder. Perhaps it the Wofford community's determination to meet the standards for accreditation that later inspired Snyder to turn down an appointment to the faculty at Stanford University to become Carlisle's successor as president. It was also true that Spartanburg was no longer a sleepy courthouse village — it had become a major railroad "hub city" and was surrounded by booming textile mills. Local civic leaders launched nearby Converse College, which combined liberal arts education for women with a nationally respected school of music. At Wofford, it no doubt seemed possible to dream bigger dreams.

The first decades of Snyder's long administration (1902-1942) were a time of tremendous progress. Main Building finally got electric lights and steam heat. Four attractive red-brick buildings were added to the campus — the Whitefoord Smith Library (now the Daniel Building); the John B. Cleveland Science Hall; Andrews Field House; and Carlisle Hall, a large dormitory. Driveways for automobiles were laid out on campus, and rows of water oaks and elms were planted. Wofford began to attract faculty members who were publishing scholarly books in their academic specialties. For example, David Duncan Wallace was the preeminent South Carolina historian of the day. James A. "Graveyard" Chiles published a widely used textbook, and he and his Wofford students founded the national honorary society for German studies, Delta Phi Alpha. The "Wofford Lyceum" brought William Jennings Bryan, Woodrow Wilson, and other guest speakers to the campus.

Although eight women graduated from Wofford in the classes of 1901-1904, the average enrollment in the early 20th century was about 400 men. The cornerstone of residential campus life was an unwritten honor code, for decades administered with stern-but-fair paternalism by the dean of the college, A. Mason DuPré. Modern student government began in 1909, and the first issue of a campus newspaper, the Old Gold & Black, appeared in 1915. World War I introduced Army officer training to the campus, and after the conflict came voluntary ROTC, one of the first such units to be approved at an independent college. Snobbery, drinking, dancing, and other alleged excesses contributed to an anti-fraternity "Philanthropean" movement among the students, and the Greek-letter organizations were forced underground for several years. A unique society called the "Senior Order of Gnomes" apparently owed its beginnings to a desire to emphasize and protect certain "old-fashioned" values and traditions associated with the college. Both intramural and intercollegiate sports were popular, with the baseball teams

achieving the most prestige. The 1909 team adopted a Pit Bull Terrier ("Jack"), and he proved to be the inspiration for a permanent mascot.

In spite of all this progress and the wide respect he earned in national higher education circles, Snyder was able make little headway in strengthening Wofford's endowment, which was valued at less than $1 million. The college was painfully dependent on its annual support from the Methodist Church, which amounted to about one-fourth of the operating budget. This financial weakness became obvious when Southern farms prices collapsed in the 1920s and hard times intensified after the stock market crash of 1929. At the height of the Great Depression, some of the faculty worked without pay for seven months. Emergency economies and a special appeal to South Carolina Methodists were necessary, but by the end of the Snyder administration, the college was debt-free and its academic reputation was untarnished.

The return of financial stability made it possible for Wofford to claim a chapter of Phi Beta Kappa in 1941, the first time such recognition had been extended to an independent college in South Carolina. Soon after this happy occasion, however, the nation plunged into World War II. Wofford graduates served in the military in large numbers, many as junior combat officers or aviators. At least 75 alumni were killed. Wofford's enrollment was so drastically reduced that the Army took over the campus on February 22, 1943, to offer accelerated academic instruction for Air Corps officers. The faculty and 96 remaining Wofford students did their work at Spartanburg Junior College or at Converse.

After the war, under the stimulus of the G.I. Bill of Rights, enrollment suddenly shot up to 720 during 1947-48. This figure was almost twice the reasonable capacity of Wofford's facilities, already taxed by two decades of postponed maintenance. Surplus Army buildings from nearby Camp Croft had to be towed in. Compounding the challenge was the fact that South Carolina Methodists deferred any capital projects or strategic planning into the mid-1950s while they tried to decide if they should unify their colleges on a new, rural campus at the foot of the Blue Ridge. While the state's Baptists approved such a plan at Furman University, the Methodist institutions ultimately retained their historic identities and campuses.

The only alumnus to serve as president of Wofford, Dr. Walter K. Greene '03, thus suffered through a very stressful administration (1942-1951) that today is remembered primarily as a golden age for Terrier athletics. Under the coaching of Phil Dickens, the 1948 football team set a national record with five straight ties. Wofford then won 15 straight games before losing a Cigar Bowl match with Florida State. Another celebrated achievement was a 19-14 upset of Auburn to open the 1950 season. Dickens' teams were known for skillful operation of a single wing offense similar to that used at the University of Tennessee, as well as solid "Wofford Gold" uniforms, whose coppery color was so close to that of contemporary footballs that it created a nationwide controversy.

Born in the years immediately following World War II, the "Baby Boomers" began moving into elementary schools in the 1950s. During the presidential administrations of Francis Pendleton Gaines (1952-1957) and Charles F. Marsh (1958-1968), the Wofford community laid the foundations to serve this much larger college population.

Administration and finances needed the most immediate attention, and Gaines was fortunate to persuade Spartanburg textile executive Roger Milliken to join the Board of Trustees. He encouraged and helped finance reforms in the business office including "forward funding," a procedure where gift income for operations from a given calendar year (for example, 1958) was set aside in interest-bearing accounts and spent during the subsequent academic year (1959-60). This practice prevented a cycle of optimistic budgeting and frantic last minute appeals to alumni and Methodist churches. It helped keep tuition and fee increases throughout the period to a minimum.

Wofford also moved ahead with a series of important building projects that included a science building, the beautiful Sandor Teszler Library, and the first campus life center. Leaving the Italianate exterior intact, the college modernized the interior of Main Building. Four new residence halls built during this period took pioneering steps away from the prevailing barracks design and gave occupants a measure of privacy and comfort. Seven fraternity lodges were built on campus to unify and improve Greek life. The new buildings and improved financial management made it possible for the college to expand its enrollment to 1,000 men.

To teach this larger student body, the college worked hard to recruit outstanding

faculty and provide better pay and benefits. Some legendary professors, such as Lewis P. Jones '38 in the history department, arrived within a few years after the war. Philip S. Covington, who served as the college's academic dean during the 1950s and 1960s, displayed a remarkable knack for looking past a curriculum vitae to spot a great teacher. The story goes that he met the late geologist John Harrington on an airplane flight. Covington talked Harrington into coming to Wofford even though the college had no major in his subject and no plans to add one. "Dr. Rock" taught his famous bus-trip laboratories into the 1970s and changed the lives of dozens of students.

Despite these efforts, Wofford still was not really ready for the "Boomers" when they finally began arriving on campus in the late 1960s. As the distinguished sociologist Wade Clark Roof '61 has said, they were (and are) "a generation of seekers," inclined to ask tough questions and unwilling to accept arbitrary authority and institutions. While students did not doubt that administrators cared deeply about their welfare, they still squawked about a long list of rules, room inspections, and twice-a-week chapel assemblies. Even at this late date, freshmen wore beanies and were "ratted" by upperclassmen during their first weeks on campus. As one student remembered, "Frank Logan '41 (the dean of students) couldn't keep you from going straight to hell, but he could relentlessly harass you on your way down."

When President Paul Hardin III arrived on campus to begin his administration in 1968, he found few radicals and revolutionaries among the students, but he felt that major changes in residence life policies and programming were overdue. A new "Code of Student Rights and Responsibilities," guaranteed academic and political freedom for students and established a judicial process regulating campus behavior. Another committee drew up a constitution for a Campus Union that reorganized and sought to empower student government. Though there have been occasional embarrassments over the years, the policy of treating Wofford students as adults has proved to be healthy and wise. It has been a principle that the college has steadfastly defended, while at the same time taking steps to ensure that caring, personal attention is available to students when they need it. An effective campus ministry and serving-learning program in the United Methodist tradition undergirds this commitment.

The college also implemented curricular reforms to encourage faculty creativity and give students more choices. The 4-1-4 calendar and the Interim term permitted a student to spend the month of January working on a "project" of special interest. The Interim became a popular feature of the Wofford experience, particularly for career-related internships, independent research, and foreign travel. Wofford's first-year humanities seminars, pioneered in the 1970s, were copied at institutions large and small. Although a broad liberal arts core curriculum remained in place, pruning departmental

requirements made it easier to double or even triple major. Students also were permitted to arrange interdisciplinary majors in the humanities or intercultural studies.

In the 1960s, Wofford also confronted its need to become a more inclusive community. This process has been evolutionary and remains ongoing. However, it is useful to recall how and why the college determined to transform itself from a campus devoted exclusively to the education of white males.

After observing a token but troubled period of racial desegregation at flagship universities across the South, the Wofford Board of Trustees in the spring of 1964 announced that applicants for admission henceforth would be considered without regard to race. Wofford thus became one of the first independent colleges across the "Cotton Belt" to take such a step voluntarily. Although it eventually became impossible to receive tax dollars for student aid and other purposes in the absence of such a policy statement, it was not clear at the time that income from public sources ever would be significant. Moreover, Wofford's church and other supporting constituencies were sharply divided on the issue. Good-faith gestures like this one by private institutions were vitally important as South Carolina struggled to steer a steady, progressive course through its Second Reconstruction.

Albert W. Gray of Spartanburg was one of several African-American men admitted to Wofford after the trustees' announcement, and he enrolled without incident in the fall of 1964. In general, while there were unquestionably some awkward and unpleasant moments, black students in those early years of desegregation found the atmosphere at Wofford to be better than the climate at large public universities. This positive beginning made Wofford a college of choice for many African-Americans as the process of desegregating public schools across the region picked up momentum.

There were a significant number of single-gender liberal arts colleges across the South in the 1960s. The men's colleges generally regarded their mission as producing professional and civic leaders of good character; many of the women's colleges focused on teacher education and the arts. In a rapidly changing world, such stereotyping was no longer appropriate, and the number of bright students willing to consider such options was naturally shrinking. Davidson, Washington & Lee, the University of the South and Wofford cautiously moved to admit women. Residential coeducation at Wofford became a reality with the Class of 1980, and by mid 90s, women made up more than 45 percent of the student body. From the first, Wofford women were high achievers, winning more than their proportional share of academic honors and exercising effective leadership in campus organizations of every kind.

In 1972, having demonstrated his ability as a faculty member and in several administrative positions, Joab M. Lesesne Jr. replaced Hardin as Wofford's president, serving until he retired at the end of the 1999-2000 academic year. Some statistical comparisons may be instructive. In 1972, Wofford's endowment market value was $3.8 million; in 1999, it was approximately $90 million, thanks in part of a $13 million bequest from the estate of Mrs. Charles Daniel. The downtown campus doubled in size, and new structures included the Raines Center with its Tony White Theater and Benjamin Johnson Arena; the $6 million Franklin W. Olin Building, the Papadopoulos Buildings; the Roger Milliken Science Center; and three new fully networked residence halls. The college received national recognition as a "higher education best buy" and came to be listed in nearly all of the selective colleges guides.

Since the early 1960s, Wofford had been struggling to find an athletic identity — the college's investment exceeded the norm for "good time sports," but it was insufficient to consistently attract the best student-athletes or improve national visibility. Aging facilities were painfully inadequate for a program that aspired to meet the recreational, intramural and intercollegiate requirements of a larger, more diverse student body. Wofford carefully moved step-by-step from NAIA to membership in the Southern Conference, NCAA Division I. Meanwhile, the construction of the Richardson Physical Activities Building, Gibbs Stadium, and the Reeves Tennis Center allowed Spartanburg and Wofford to become the summer training camp home of the NFL's Carolina Panthers, founded and owned by Jerry Richardson '59.

When he became Wofford's 10th president in 2000, Dr. Benjamin Dunlap challenged the faculty to "make connections," combining its core curriculum with advanced and highly innovative opportunities for research, internships, and study abroad. Open Doors studies conducted by the Institute of International Education for Students consistently ranked Wofford in the top five of all colleges and universities in the nation in the percentage of students who studied and traveled abroad. Faculty earned national recognition in the development of multi-disciplinary learning communities. "The Novel Experience" for first-year students was ingeniously designed to emphasize the importance of making connections—across disciplines and between town and gown—beginning in the first week of a student's Wofford career. The Community of Scholars not only provided opportunities for sophisticated research, but also offered a summer-long residential community bridging both disciplines and differences of age and status. Similarly, Wofford's groundbreaking Success Initiative, working in multi-disciplinary, student-led teams, made connections between theory and problem solving. As an outward and visible equivalent of such intellectual adventures, the Wofford Village created an apartment-style housing option to renew personal relationships among seniors while further connecting them with lifestyles they planned to take up as they graduated and moved out into the world.

If William Wightman could return to the Wofford campus today, he undoubtedly would look with pride at his Main Building, freshly restored and renovated to serve new generations of 21st century students. He surely could relate to the Wofford woman of the Class of 1991 who wrote, "It is through Wofford that I found myself. And it is through the memories of my time there that my joys are intensified and my miseries are lessened. The majestic white building that I know as 'Old Main' is the harbor for my soul, and whenever I need strength, I call upon those twin towers to give it to me."

Standing beneath the high towers, Wightman would also perceive roots that have grown continuously deeper since the college's beginning. Methodist Bishop William H. Willimon '68 is the former dean of the chapel at Duke University and the father of two recent Wofford graduates. He explained it this way: "Education is not buildings, libraries, or faculty with big books. It's people, the mystery of one person leading another as Virgil led Dante, as Athena led young Telemachus, to places never yet imagined, through thoughts impossible to think without a wise guide who has patience with the ignorance, and therefore the arrogance, of the young. Wofford and its faculty have a way to helping students believe in themselves — yet never to excess. I loved it all."

And so, the words that Professor K.D. Coates wrote for the Wofford Centennial in 1954 still ring true in the first decade of the third millennium: "Somehow, in spite of all the complexities, the individual student still manages to come in contact with the individual teacher. And occasionally too, as in the old days, a student goes out and by words and deeds makes a professor remembered for good intentions, and a college respected for the quality of its worksmanship."

For more about the history of Wofford College, visit the Archives.

Program, Papers & Abstracts

You must attend and present your paper/poster to be published in the July issue of SEB. Please visit the ASB web site for the latest listing of papers and posters for the Spartanburg meeting! www.sebiologists.org

The Abstract Deadline is Friday, January 31, 2014.

For questions concerning posters and paper submissions, please contact the program chair, Dr. Howard S. Neufeld at email: neufeldhs@appstate.edu, or by phone at 828-262-2683.

The deadline was extended to Friday, February 14, 2014.

ASB 2014 Field Trips

1. Beth Button of the USC Upstate Watershed Ecology Center (http://www.uscupstate.edu/academics/arts_sciences/watershed/) will lead a Stream Ecology Program at Camp Mary Elizabeth.

2. Dr. Patrick Mc Millan, Director of the South Carolina Botanical Garden (http://www.clemson.edu/public/scbg/) and host of the Emmy award winning ETV nature show Expeditions with Patrick McMillan (http://www.clemson.edu/public/expeditions/), will lead a tour of the Heritage Nature Garden at the South Carolina Botanical Garden.

3. Drs. Mike Dorcas (Davidson College; http://www.bio.davidson.edu/dorcas/), Melissa Pilgrim (USC Upstate; http://srel.uga.edu/facstaffpages/pilgrim.html) and Stephen Richter (Eastern Kentucky University; http://people.eku.edu/richters/meca/) will lead Bioblitz surveys focused on building species list of herpetofauna discovered on recently acquired Spartanburg Area Conservancy (SPACE) properties (http://spartanburgconservation.org/).

Symposia

1. Establishing Your Department's Vision for Change: Our Shared Mission for Every Student, facilitated by Leadership Fellows from the Partnership for Undergraduate Life Sciences Education (PULSE)

2. Natural Disturbances and Range of Variation: Type, Frequency, Severity, and Post-disturbance Structure in Central Hardwood Forests, organized and co-hosted by Cathryn Greenberg (US Forest Service, Southern Research Station) and Beverly Collins (Western Carolina University).

3. Educational Opportunities at Biological Field Stations of the Southeastern United States, sponsored by the ASB Education Committee (Chris Havran and Kirk Stowe).

Commercial Workshops/Special Sessions

Commercial Workshops/Special Sessions will also be available for all registered attendees! These workshops presented by exhibitors will allow you to learn about the latest tips from the experts. The fee for each workshop will be $10 each, and you may register to attend one or more workshops during the Annual ASB Meeting. To register, and to read about the workshop descriptions, go to http://www.sebiologists.org and review the descriptions on the registration pages. Space is limited and you must pre-register for them, so don't delay! All workshops will be held at the Spartanburg Marriott.

Silent Auction

ASB will again hold a silent auction next to the exhibitors. All of the proceeds will go towards supporting student travel to the annual meeting. Come look at the items up for bid and help support our presenting students.

Social Events

Wednesday Night Mixer: Immediately following the Plenary Session, there will be a social mixer with LIGHT hors d'oeuvres, a cash bar, and live music. The mixer is a long tradition at ASB meetings and is a great time to renew old acquaintances and make new ones. Be sure to sign up for this FREE event on the registration form. To be held on the Wofford College Campus. You must have a ticket to attend.

Thursday Night Social

The "Fantasy" Band will be performing LIVE. It's the ultimate party at the Annual Meeting. They have shared the stage with stars like Patti Labelle and KC & The Sunshine Band.

http://www.eastcoastentertainment.com/artist/fantasy

Some say that a meeting is judged by the success of the Thursday Night Social. We hope to maintain a longstanding tradition of music, dancing, and entertainment that will give you a break from the work of the meeting.

The Social will be held at the Spartanburg Marriott. Take 5 dedicated musicians, add Beach, the hot sounds of Motown, and the smoothed out R&B, mix it with breath taking vocals and a groove that's all their own, and you have the band known as "Fantasy".

Fantasy has performed all over the world for venues such as Japan, Korea, Hawaii, Carnival Cruise Lines, Venetian Hotel and Casino in Las Vegas, Gov. Bev Perdue's Inaugural Ball, Senator John Edwards Birthday Bash and Carolina Hurricane's Stanley Cup Ball...just to name a few.

Don't forget the best BBQ and Spartanburg's very own local microbrew.... RJ Rocker!

Interactive, high energy and fun for everyone! You will not want to miss this!

Friday Night Awards Banquet

The culmination of the annual meeting is the ASB Awards Banquet, where we honor the accomplishments of members and students. Delicious beef, chicken and vegetarian options are available. Following dinner, awards will be presented. Remember that long speeches are no longer a part of the banquet. (A reminder: those competing for ASB awards must register for and be present at the banquet in order to receive the award.)

Activities for Guests

Attendees and family members will find many interesting places to visit in the Spartanburg area. Visit the Spartanburg Web site

http://www.visitspartanburg.com/

Conference Badges

You will receive your meeting badges when you arrive in Spartanburg. Simply proceed to the Registration Area at the Spartanburg Marriott to receive your badge. Guests of conference participants should ask for guest conference badges at the registration desk. **YOU MUST WEAR YOUR BADGE TO ALL FUNCTIONS, INCLUDING SOCIAL EVENTS!**

Workshop Form

2014 Association of Southeastern Biologists
April 2-5, 2014 Spartanburg, SC

Workshop Description: All commercial workshops will be conducted during the meeting on a first-come first-served basis. Classroom style seating will be provided at no additional charge to the presenter. Each classroom will be set for a minimum of 50 participants. A screen, laptop and LCD Projector will be provided for each room. **One workshop per application please. Please complete the entire form! Only full exhibiting companies are permitted to present commercial workshops. Please contact Joey Shaw, joey-shaw@utc.edu with questions!**

Company/Organization_____
(Please list company name as you wish it to appear on printed materials)

Presenter_____ Email Address:_____
Contact Address: _____
_____
Telephone:_____ Fax: _____
Web site:_____
Workshop Title:_____

50 Word Workshop Description: **Please e-mail description to joey-shaw@utc.edu**
_____
_____
_____
(Description will appear on Web site and Registration Form)

Please indicate which time slot you prefer below:
Pre-Conference Workshop: Wed 4pm-5:30pm _____

Thurs 8:30am-10am___ Thurs 10:30am-12noon___ Thurs 1:30pm-3pm___
Thurs 3:30pm-5pm___ Fri 8:30am-10am___

Hold Harmless Clause

The workshop presenter assumes all responsibility and liability for losses, damages and claims arising out of injury to the presenter's display, equipment and other property brought upon the premises of the convention facilities and shall indemnify and hold harmless the association agents, servants and employees as well as the ASB organization from any losses, damages and claims.

Upon acceptance by ASB, this signed application and Workshop Contract form becomes the contract for the 2014 ASB Annual Convention. Workshop presenter will be notified of their acceptance.

_____
Signature Date

Return Workshop Form to Joey Shaw, joey-shaw@utc.edu.

Explanation of Exhibiting at the Annual Association of Southeastern Biologists

Spartanburg, SC

Regular Exhibitor

Exhibitor Package: Each $975 booth consists of (1) 10' X 10'booth, (1) 6' X 24" white covered table with skirting, 2 chairs and 1 wastebasket, security services, hot link from ASB Web Site, 2 tickets to Thurs Night Social, The Fantasy Band "Beer & BBQ" Bash. AM & PM breaks, Exhibitor Pizza Party during installation, exhibit hall signage, booth identification sign, recognition announcements and one 50-minute commercial workshop with **full** payment of booth, 2 complimentary badges for employees only (additional badges are $175/person), 25 word description will appear in the final show program, Private Exhibitor-Only Lounge, 2 tickets to the Patrons & Exhibitors Breakfast.

Only full paying exhibitors will be granted one complimentary commercial workshop.

Exhibit Hall Hours

Wednesday, April 2, 2014

9am - 4pm – Exhibitor Move-In

12noon - 2pm – Exhibitor Pizza Party

6pm - 10 pm – ASB Welcome Reception-Wofford College
Exhibit Hall is **NOT** Open.

All exhibitors are invited and welcomed to attend the plenary session and welcome reception. Exhibitors who wish to sell items at this event will be provided a table in the reception area.

Thursday, April 3, 2014

8am - 5:00pm – Exhibits Open

Friday, April 4, 2014

9am - 2:00 pm – Exhibits Open

2pm - 4pm – Exhibitor Move-Out

In recognition of your support of ASB, all Exhibitors are welcomed to attend the Free Exhibitors and Patrons Breakfast. A separate letter of invitation will be mailed to you in March 2014.

Please note: The Exhibit Hall is carpeted!

PLENARY SPEAKER

Henry M. Wilbur

BFD RUNK Professor of Biology
University of Virginia, Charlottesville

Switching Sex in an Uncertain Environment

Biographical Notes

1966, BS (Zoology), Duke University, Durham, NC
1971, PhD (Zoology), University of Michigan, Ann Arbor, MI
Competition, Predation and the Structure of the *Ambystoma – Rana sylvatica* Community, Charles F. Walker, advisor (Nelson G. Hairston, Donald W. Tinkle, Frank B. Livingstone members).

Henry Wilbur spent his formative years in Waynesboro active in Boy Scouts and Nature Camp. He majored in zoology at Duke and then received his Ph.D. in Zoology at The University of Michigan. He returned to the Duke Zoology Department for 17 years before moving to UVA to be Director of Mountain Lake Biological Station. He has served as president of The American Society of Naturalists and has been an editor for The American Naturalist, Ecology, and Evolution. His research has included fieldwork on Leach's Petrel, Painted Turtles, temporary pond communities, various amphibians, forest dynamics and life history evolution.

Becky and Henry

Please donate to the Silent Auction!!

The silent auction was a huge success the past two years in Charleston and Athens. With YOUR HELP, we raised over $8,500 for the Student Travel Fund in the past two years. This fund was established in 2006 to help defer travel cost for Graduate Student members presenting papers or posters during the ASB Annual Meeting. Since the fund was created, many students have benefited from these travel grants.

In order to surpass the amount we raised in Charleston and Athens, we need Your Help again this year in Spartanburg, SC, the site of the Annual ASB Meeting, April 2-5, 2014. The donated items can be books, to handcrafts, to memorabilia, to nature photography, to t-shirts or anything else you think appropriate. Some examples of the recent bestselling items are gift baskets, gift cards, nature books, jewelry, wine or any adult beverage and unique gifts.

- If you have an item you would like to donate to the Silent Auction, please contact Patricia Cox at pbcox@tva.gov so we can add your item to our list.

- If you are unable to attend, please mail (via US Postal Service) your item to Patricia B. Cox before Friday March 28th at:

  Patricia B. Cox
  3601 Garden Dr.
  Knoxville, TN 37918

- If you are attending the meeting, please bring your item to the Silent Auction Area in the Exhibit Hall before 10:00 AM on Thursday April 11 and one of the committee members will be available to receive it.

We want to thank you in advance for participating in this worthwhile event. If you have any questions, please feel free to contact one of the Committee Members below:

Patricia Cox -- pbcox@tva.gov
Kim Marie Tolson -- tolson@ulm.edu
Pat Parr -- parrpd@ornl.gov
Eloise Carter -- ecarter@learnlink.emory.edu
Bonnie Kelley -- bonnie.kelley@uncp.edu
Diane Nelson -- janddnelson@yahoo.com

Silent Auction

_____Yes, I would like to contribute to the Silent Auction to help with student travel to the Annual Meeting.
(100% of all proceeds to benefit student travel).

Examples of Previous Submitted Items

Dissection Set
Corporate Gift Certificates
Frog Model
Dinner for Two
Two Nights Hotel Accommodations
Books
Charts
Wine Gift Basket
Educational Charts
Microscope
Books

Description of item(s) to be donated:

_____
_____
_____
_____
_____
_____

Please check appropriate option:

____Please contact me at the convention to pick up donation.
____I will mail donation to Patricia B. Cox, 3601 Garden Drive, Knoxville, TN 37918; 865-632-3609; pbcox@tva.gov.

Signature Date phone

Title e-mail

Return Silent Auction form Patricia B. Cox, 3601 Garden Drive, Knoxville, TN 37918; 865-632-3609; pbcox@tva.gov.

Spartanburg Marriott

299 N Church Street
Spartanburg, SC 29306

Attendee Pre-Registration Forms
(Mail or Fax Forms)

For Assistance with Registration please contact
Edgar B. Lickey, Ph.D.
Interim Treasurer, Association of Southeastern Biologists
402 East College Street, Box 125
Bridgewater College
Bridgewater, Virginia 22812
phone: 540-828-5426
elickey@bridgewater.edu

Attendee PRE-Registration Form Deadline & Instructions

This form is no longer valid after midnight March 26, 2014
Pre-Registration Deadline is midnight March 26, 2014
E-mailed, Faxed & Online Registration Closes midnight March 26, 2014
Mailed Registrations must be postmarked by March 20, 2014
After midnight March 26, 2014 you must register On Site.
Please contact Ed Lickey for questions regarding registration:
elickey@bridgewater.edu 540-828-5426

PLEASE CHECK (DOWNLOAD AND PRINT FORM) FROM THE ASB WEB SITE,
http://www.sebiologists.org/meetings.html
FOR THE MOST CURRENT ATTENDEE REGISTRATION FORM THAT INCLUDES WORKSHOPS, FIELD TRIPS, PAST PRESIDENTS' BREAKFAST, SPECIAL LUNCHEONS & SPECIAL SESSIONS

Note: To register for the meeting as an ASB Member and receive the discounted registration rate, your membership dues must be up-to-date. If you need to join or renew, you must either: email, fax, or mail your payment with a check or credit card information to the ASB treasurer postmarked by March 20th or you may pay for your membership online by midnight March 26 or you may pay for your membership on site at time of meeting. For membership questions, contact the ASB treasurer, Ed Lickey, (elickey@bridgewater.edu**) phone 540-828-5426**

One Form Per Attendee Please
PRINT CLEARLY PLEASE

*First Name: *Middle Name:

*Last Name:

*Institution/Organization:

*Address 1:

Address 2:

*City: *State:
*Postal Code:

*Work Phone: Fax:
Country:

Home Phone: Cell Phone:

**Attendee's E-Mail Address
_____

*Indicates a required field
** You must provide an e-mail address to receive an immediate confirmation of your registration. Each registrant must have his/her own e-mail address! Please do not use the same e-mail address for multiple registrants.

Please check appropriate status--You will need to present student ID at check-in.

___Faculty
___Graduate
___Undergraduate
___Other_____

Affiliations: __ASB __ESA __BBB __SABS __SWS __BSA
(Check all that apply) __SHC__SSP__SEMS__SE ASIH __NABT

Circle Correct Amount Below

You Will Need to Present Student ID at Check-In
Please be sure your membership is up to date if you are registering as a Member

Registration Type	Early Rate	On-Site Rate
General Registration		
Regular	$300	$370
Student	$175	$215
ASB Member Discounts		
ASB Regular Member	$225	$295
ASB Student Member	$130	$170
ASB Patron Member	$0	$0
ASB Emeritus Member	$225	$295

(Early Registration Deadline is 3/26/14)

Social Events *(Please check **all** events you plan to attend; see Program for details)*

Session Description	# of Tickets	Pre-Registration	On Site	Total
WEDNESDAY NIGHT PLENARY & SOCIAL				
Wednesday Evening Post-Plenary Reception; heavy hors d'oeuvres w/Cash Bar. **You Must have a Ticket to Attend.**		$0	$0	
THURSDAY NIGHT SOCIAL ***Fantasy Band, beer, and barbecue bash***				
Thursday Night Social- **Regular** Tickets		$35	$35	
Thursday Night Social- **Student** Tickets (Must Present Student		$20	$20	

ID at Check-In)				
Thursday Night Social- **Guest** Ticket (Must be Registered as a Guest) **Name of Guest:**		$35	$35	

FRIDAY NIGHT AWARDS BANQUET	**# of Tickets**	**Pre-Registration**	**On Site**	**Total**
Friday Night Awards Pre-Banquet Social (cash bar)		$0	$0	
Regular Friday* Evening *ASB Awards Banquet* Each entrée includes a Garden Salad, Bread, Chef's Selection of Vegetables, Beverage, and dessert Please indicate: ___Beef ___Chicken ___Vegetarian		$35	$35	
Regular Guest* Friday Evening *ASB Awards Banquet* Each entrée includes a Garden Salad, Bread, Chef's Selection of Vegetables, Beverage, and dessert Please indicate: ___Beef ___Chicken ___Vegetarian (Must be registered as a guest) **NAME OF GUEST:**		$35	$35	
Student Friday Evening ***ASB Awards Banquet**** Each entrée includes a Garden Salad, Bread, Chef's Selection of Vegetables, Beverage, and dessert Please indicate: ___Beef ___Chicken ___Vegetarian		$20	$20	

***Reminder: You must purchase a ticket and attend the banquet to be eligible for an ASB Award.**

SPECIAL BREAKFAST & LUNCHEON DESCRIPTIONS	# of Tickets	Early Registration	On Site	Total
Thursday Morning Past Presidents' Breakfast		$25	$30	
Human Diversity Committee: Thursday Luncheon & Roundtable Discussion-Human Diversity & the Future of ASB -A candid discussion about the committee, its future and the relationship with ASB -Limited to 50 Participants, Lunch Included for All Participants		$0	$0	
SHC-Society of Herbarium Curators: Southeast Chapter Thursday Luncheon **Select one** Choice of sandwich (ham, turkey or vegetarian). Includes Apple, Chips, Cookie, and Drink		$14	$14	
ESA/SE Friday Chapter Luncheon **Select one:** Choice of sandwich (ham, turkey or vegetarian). Includes Apple, Chips, Cookie, and Drink		$14	$14	
SABS/SEBSA Friday Chapter Breakfast		$25	$30	
Education Committee: Friday Luncheon & Roundtable Discussion-How May We Serve You? -Attendees Will Provide Feedback About Future Topics/Concerns for the Committee and ASB -Limited to 50 Participants, Lunch Included for All Participants		$0	$0	

Additional Events *(Please check **all** events you plan to attend; see Program for details)*

Special Session Descriptions				
Special Sessions will be available for all registered attendees! These sessions presented by exhibitors will allow you to learn about the latest tips from the experts. These sessions will be free, and you may register to attend one or more session during the Annual ASB Meeting. Space is limited and you must register for the special sessions, so don't delay! All sessions will be held at the Marriott.				
WORKSHOPS	**# of Tickets**	**Pre-Registration**	**On Site**	**Total**
eScience - Thursday April 3rd[h] 10:30am **Title: eScience Labs - Come explore the future.** This presentation discusses student success and learning, as well as the obstacles and opportunities, related to developing an online science lab course. With the use of technology and engaging lab experiments, science instruction online can extend the student experience beyond that of a traditional classroom. Come explore the future of science education and learn how it is possible to offer online lab science courses successfully. www.esciencelabs.com		$0	$0	

Lunch Offerings

The Spartanburg Marriott is situated 3/10 mile or more from various restaurants. There are a few fast food offerings that are about a 10-minute walk from the meeting location.

We encourage you to pre-order either a Box Lunch or the Lunch Bar (reducing the cost of the meeting is aided by our entering into a meal quota agreement with the Spartanburg Marriott).

Thursday Box Lunches *(Served in the Exhibit Hall on Thursday and Friday Only. Must present lunch ticket. No cash sales on site)*	**# of Tickets**	**Pre-Registration**	**On Site**	**Total**
Ham Sandwich-(Thursday) Includes Apple, Chips, Cookie, and Soft Drink		$14	$14	
Turkey Sandwich -(Thursday) Includes Apple, Chips, Cookie, and Soft Drink		$14	$14	
Vegetarian Sandwich-(Thursday) Vegetables, and Cheese, Apple, Chips, Cookie, and Soft Drink		$14	$14	

Friday Box Lunches	**# of Tickets**	**Pre-Registration**	**On Site**	**Total**
Ham Sandwich-(Friday) Includes Apple, Chips, Cookie, and Soft Drink		$14	$14	
Turkey Sandwich-(Friday) Includes Apple, Chips, Cookie, and Soft Drink		$14	$14	
Vegetarian Sub-(Friday) Guacamole, Vegetables, and Cheese, Apple, Chips, Chocolate Chip Cookie, and Soft Drink		$14	$14	

Lunch Buffett *(Served in the Sparks Grill on Thursday and Friday Only. We Encourage You to Pre-order This Lunch Option or a Box Lunch)*	**# of Tickets**	**Pre-Registration**	**On Site**	**Total**
Buffet -Thursday Only Hot food buffet, with two entrees, salad, cooked vegetables and pasta		$18	$18	
Buffet -Friday Only Hot food buffet, with two entrees, salad, cooked vegetables and pasta		$18	$18	

Saturday Field Trips *For Information on Field Trips, Please contact: Melissa Pilgrim: e-mail:* MPILGRIM@uscupstate.edu *Work phone (864) 503-5781*	**# of Tickets**	**Pre-Registration**	**Total**
Field Trips			
1. Stream Ecology at Camp Mary Elizabeth. Trip Leaders: Beth Button Beth Button of the USC Upstate Watershed Ecology Center (http://www.uscupstate.edu/academics/arts_sciences/watershed/) will lead a Stream Ecology Program at Camp Mary Elizabeth. The program will center on capturing stream benthic macro-invertebrates for identification. After identifying the stream residents, we will discuss what they tell us about the water quality of their home. All ages are welcome, but come dressed to wade in the stream and get a little wet! ***Who:*** Limited to 25 people ***Where:*** Camp Mary Elizabeth; 330 Scout Drive; Spartanburg, SC 29301 ***When:*** Saturday, April 5th, 10am to		Free Field Trip – you may want to purchase a box lunch	

12noon			
2. Tour the South Carolina Botanical Garden. Trip leaders: Patrick McMillan Dr. Patrick Mc Millan, Director of the South Carolina Botanical Garden (http://www.clemson.edu/public/scbg/) and host of the Emmy award winning ETV nature show Expeditions with Patrick McMillan (http://www.clemson.edu/public/expeditions/), will lead a tour of the Heritage Nature Garden at the South Carolina Botanical Garden. Wear your comfortable hiking boots!), and Gary W. Barrett (gbarrett@uga.edu). **Who: Limited to 20 people** **Where: 102 Garden Trail; Clemson, SC 29634** **When: Saturday, April 5th, 10am to 2pm**		Free Field Trip – you may want to purchase a box lunch	

Grand Total				
Please Enter Amount Here for Grand Total_____ (Please double check your math before submitting your registration.)				

Method of Payment Page--Please See Below.

Registration & Payment Information: (5 Options)

For Assistance with Registration please contact:
Ed Lickey 540-828-5426
or
Zack Murrell 828-262-2674 or 828-406-1405 (cell)

Option A: Register Online with Credit Card
Register online at http://www.sebiologists.org/meetings.html for secure online credit card payment. **You must provide an e-mail address to receive an immediate confirmation of your registration. WE WILL HAVE THIS OPTION NEXT WEEK, THE WEEK OF MARCH 10.**

Option B: Fax Your Form with Credit Card
Fax your completed registration form along with your credit card information to Edgar B. Lickey, Interim Treasurer, Association of Southeastern Biologists: Fax # xxxxxxxxxxx (secure fax machine). **You must provide an e-mail address to receive an immediate confirmation of your registration.**

Option C: Email Your Form with Credit Card (we do not suggest this option, but it is up to you and should you choose to send it this way we will process it)
Email your completed registration form along with your credit card information to Edgar B. Lickey, Interim Treasurer, Association of Southeastern Biologists (elickey@bridgewater.edu).

Option D: Mail Your Form with Credit Card
Mail your completed registration form along with your credit card information to Edgar B. Lickey, Interim Treasurer, Association of Southeastern Biologists; 402 East College Street; Box 125; Bridgewater College; Bridgewater, Virginia 22812. **You must provide an e-mail address to receive an immediate confirmation of your registration.**

Option E: Mail Your Form with a Check (Must be post marked by March 24, 2014)
Mail your completed registration form and your check to ASB, c/o Edgar B. Lickey, Interim Treasurer, Association of Southeastern Biologists; 402 East College Street; Box 125; Bridgewater College; Bridgewater, Virginia 22812. Please make your check payable to: The Association of Southeastern Biologists. **You must provide an e-mail address to receive an immediate confirmation of your registration.**

___Visa __MasterCard __Discover __ AMEX

CC# ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Exp Date __/__

3 digit security code on back of card ☐☐☐

Name As It Appears On Card _____
Credit Card Billing Address
***Last Name** _____ ***First Name**_____
***Institution/Organization** _____
***Address** _____
***Line 2** _____
***City**_____ ***State**_____ ***Postal Code**_____
***Phone** _____

Cancellation policy: Due to the late registration this year, we cannot offer refunds.

Office Use Only

Paid with check #_____ on Date_____
Rec'd by:_____

Paid with credit card # _____ on Date:_____
Rec'd by_____

Confirmation Sent via: e-mail_____ US Mail _____ on _____

ASB 2014 Spartanburg—Hotel Information

Please use the ASB approved list and sponsoring hotel for regular & student attendees and exhibitors. Please call either hotel directly to make your reservations.

- **ASB will receive exclusive benefits for using the ASB sponsored hotel(s).**

Headquarters Hotel
Spartanburg Marriott
299 N Church St, Spartanburg, SC 29306
(864) 596-1211

- **The Spartanburg Marriott is our Headquarters Hotel.**
- **Park your car at the hotel and leave it until the end of the convention. Parking is free**
- **All conference events will be held at The Marriott and Wofford College.**
- **Please remember to ask for the special ASB Group Rate (code: ASB) when making reservations. The approved hotels are providing additional services to accommodate ASB. Please make your reservations as soon as possible. The Spartanburg Marriott is our Headquarters Hotel and has been secured for Exhibitors and ASB attendees. There is NO daily parking fee at the Marriott for personal vehicles and vans. Please visit their web site for directions to their property or use your (GPS). THE LAST DAY TO RESERVE A ROOM AT THE DISCOUNTED RATE IS 5pm 3/10/2014.**

Occupancy	Rate
Single	$117
Double	$117
Triple	$117
Quad	$117

Free wireless internet access in the lobby/restaurants, free internet in the business center, on site professional shoe shine, on site fitness and outdoor swimming pool and free limited parking.

Exhibitor Booth Registration Form

2014 Association of Southeastern Biologists
April 2-5, 2014 Spartanburg, SC
Spartanburg Marriott & Convention Center

Exhibitor Package: Each $975 booth consists of (1) 8' X 5' booth, (1) 6' X 24" white covered table with skirting, 2 folding chairs and 1 wastebasket, security services, hot link from ASB Web Site, 2 Tickets to Thurs Night Social-The Fantasy Band*"Beer & BBQ"* , AM & PM breaks, Exhibitor Pizza Party during installation, exhibit hall signage, booth identification sign, recognition announcements and one 50-minute commercial workshop with full payment of booth only (workshop form must be submitted by Feb 28, 2014), 2 complimentary badges for employees only (additional badges are $175/person), 25 word description will appear in the final show program (The exhibit hall is carpeted).

Company/Organization_____
(Please list company name as you wish it to appear on printed materials)

Representative (The person who will receive the Exhibitor Service Kit):
_____

If you need additional Service Kits, please e-mail: joey-shaw@utc.edu

Email Address:_____

Contact Address:_____

_____

Telephone:_____ Fax: _____

Web Site: (Hot Link from ASB Web Site)_____

25 Word Workshop Description: Please submit description via e-mail to joey-shaw@utc.edu _____

_____
(Description will appear in Final Show Program of *Southeastern Biology*)

Qty	Item	Amount
_____	Patron Member Booth	included
_____	1st Booth	$975
_____	Each Additional Booth	$500
_____	Publishers Book Exhibit	$250/title

_____ Yes I would like an AD in Southeastern Biology, Final On-Site Program (circle choice)

¼ page=$250, ½ page=$375, full page=$500

(The On-Site Program Ad is included at no charge for Patron Members)

Total Amount Enclosed $_____

Requested Booth Number (see Floor Plans #1 & # 2):

1st choice____ 2nd choice_____ 3rd choice_____

Hold Harmless Clause: The Exhibitor assumes all responsibility and liability for losses, damages and claims arising out of injury to the exhibitor's display, equipment and other property brought upon the premises of the convention facilities and shall indemnify and hold harmless the association agents, servants and employees as well as the ASB organization from any losses, damages and claims.

Upon acceptance by ASB, this signed application and Exhibitor Contract form becomes the contract for booth rental for the 2014 ASB Annual Convention. Exhibitors will be notified of their acceptance no later than 1 March 2014. Refund Policy: 50% on or before 1 March 2014, 0% on or after 2 March 2014.

Signature Date

Title e-mail

Return Exhibitor Registration Form with Check or Credit card info to Joey Shaw, Dept. of Biological and Environmental Sciences, University of Tennessee, Chattanooga, TN 37403; joey-shaw@utc.edu.

*Exhibitor Service Kits to be e-mailed by 30 March 2014

Industry Partners Form

2014 Association of Southeastern Biologists
April 2-5, 2014 Spartanburg, SC
Spartanburg Marriott & Convention Center

_____Yes, I Would Like To Partner With ASB And Participate In the Industry Partners Program !!

Company/Organization_____
(Please list company name as you wish it to appear on printed materials)

Representative:_____ Email Address:_____
Contact Address:_____
_____
Telephone:_____ Fax: _____

*Special Recognition at Thurs Night Social, Friday Night Banquet, signage at the Convention Center and a listing in Final Show Program of Southeastern Biology!

Qty	Item	Amount
_____	Coffee Breaks (8 Opportunities)	$500/opportunity
_____	Thurs Night Social (4 Opportunities)	$900/opportunity
_____	Fri Night Banquet Cash Bar	$850
_____	Yes I wish to present a workshop. See Workshop Form (Due by Feb 28, 2014)	
_____	24-Hour Exhibit Hall Security	$1,000
_____	ASB Executive Committee Breakfast	$350
_____	Yes, I would like to Donate an Item to the Silent Auction to help with Student Travel	
_____	ASB Web Site Hot Link to Your Company (12 months)	$375
_____	Yes, I would like an AD in all 4 issues of Southeastern Biology, (circle choice) ¼ page=$200, ½ page=$325, full page=$425	
_____	AD in Final On Site Program (circle choice) ¼ page=$175, ½ page=$225, full page=$275	
	Industry Partners Total	**$_____**

Signature Date

Title e-mail

Return Industry Partners Form With Check to Joey Shaw, Dept. of Biological & Environmental Sciences, University of Tennessee, Chattanooga, TN 37403; joey-shaw@utc.edu.

Advertising with the Association of Southeastern Biologists

Reach Your Target Audience and
Promote your Products and Services Throughout the Year !!
Advertise in Southeastern Biology.

Advertise in Southeastern Biology and reach about 1,000 members from 42 states and 13 countries. ASB publishes 4 issues of Southeastern Biology per year and an On-Site Program for the Annual Meeting. Choose one or both opportunities to increase your marketing exposure. Promote your products and services throughout the year!

¼ Page 1½" X 1"

½ Page 3" X 2"

Full Page 7½" (↓) X 4 ¾"

Advertising with the Association of Southeastern Biologists (cont.)

_____ Yes, I would like an AD in all 4 (Full Color)
4 issues of Southeastern Biology, (circle choice)

¼ page=$200, ½ page=$325, full page=$425

_____ AD in Final On-Site Program (circle choice) (Black & White Only)

¼ page=$175, ½ page=$225, full page=$275

*All must be submitted in pdf.

Return Form with Check or Credit Card Information to Joey Shaw, Dept. of Biological & Environmental Sciences, University of Tennessee, Chattanooga, TN 37403; joey-shaw@utc.edu.

Exhibit Hall Badge Form

2014 Association of Southeastern Biologists
April 2-5, 2014 Spartanburg, SC
Spartanburg Marriott & Convention Center

FAX This Completed Form Before 3/15/14 To Joey Shaw

FAX # (423) 425-2285

Company/Organization _____

Name City State

1.

2.

Additional Badges $175/ea

Name City State

1.

2.

3.

4.

Note: Each Company receives two complimentary exhibit hall passes per booth payment. Badges are to be used for company employees only. Partnering companies must pay to register for the ASB Conference. BADGES MUST BE WORN TO BE ADMITTED INTO ALL FUNCTIONS!!!

Re-Cap & Payment Information

Description	Amount
Exhibiting Full Booth	**$_____**
Publishers Book Exhibit	**$_____**
Advertising	$_____
Industry Partners	$_____
Total	**$_____**

Mail or Fax Your Forms
Fax or mail your completed registration form along with your credit card information or check to Joey Shaw, Dept. of Biological & Environmental Sciences, University of Tennessee, Chattanooga, TN 37403; joey-shaw@utc.edu

___Visa __MasterCard __Discover __ AMEX

CC# ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Exp. Date __/__

3 digit security code on back of card ☐☐☐

Name As It Appears On Card_____

Credit Card Billing Address
***Last Name_____ *First Name_____**
***Institution/Organization_____**
***Address_____**
***Line 2_____**
***City_____ *State_____ *Postal Code_____**
***Phone _____**

Affiliate Societies Meeting with ASB
APRIL 2-5, 2014

The following affiliate societies will be in attendance at the 2014 Annual Meeting. We anticipate an excellent diversity of paper and poster presentations. The societies and their contacts are listed below.

Beta Beta Beta
Southeastern District I
Dr. Leonard (Lee) Sutton
Department of Biology
East Carolina University
Greenville, NC 27858
(252) 328-5745; Fax (252)328-4178)
E-mail: suttonle@ecu.edu

Beta Beta Beta
Southeastern District II
Dr. Christi Magrath
Dept. of Biological & Env. Sci.
Troy University
Troy, AL 36082
(334)670-3622
E-mail: cmagrath@troy.edu

Botanical Society of America
Southeastern Section
Dr. Zack Murrell
Department of Biology
Appalachian State University
Boone, NC 28608
(828) 262-2674
E-mail: murrellze@appstate.edu

Ecological Society of America
Southeastern Chapter
Dr. Kimberly J. Bolyard
Department of Biology
Bridgewater College
Bridgewater, VA 22812
(540) 828-5427; Fax: (540) 828-5661
E-mail: kbolyard@bridgewater.edu

Society of Herbarium Curators
Dr. John Nelson
Department of Biological Science
University of South Carolina
Columbia, SC 29208
(803)777-8196
E-mail: nelson@biol.sc.edu

Society of Wetland Scientists
South Atlantic Chapter
Dr. David Bailey
U.S. Army Corps of Engineers
CE-SAW-RG-L
69 Darlington Avenue
Wilmington, NC 28403-1343
(910) 251-4469
E-mail:
David.E.Bailey2@usace.army.mil

Southern Appalachian Botanical Society
Dr. Wendy Zomlefer
2502 Plant Sciences
University of Georgia
Athens, GA 30602
(706) 583-0389
E-mail: wendyz@plantbio.uga.edu

SPECIAL REMINDERS FROM THE JOURNAL EDITOR

ASB BANQUET ATTENDANCE

Please keep in mind that recipients of ASB awards must be present at the annual ASB banquet to receive the award. Therefore, all applicants for ASB awards must attend the banquet to insure the presence of the winners.

MEMBERSHIP AND REGISTRATION UPDATE

All applicants for ASB research awards must be ASB members in good standing, and be duly registered for the annual meeting. If necessary, check with the Treasurer for verification before you apply.

Please make sure your membership status is up-to-date amply before the deadline for abstract submission and for annual meeting registration. Please be aware that mailing a check or money order for membership renewal to the treasurer and then trying to register online or by mail for the annual meeting on the same day does not work. Moreover, trying to pay for membership renewal online in tandem with registering for the annual meeting online does not work well either.

EXTRA ABSTRACT SUBMISSION

Besides sending abstracts of papers and posters to the Program Committee by January 31, 2014, anyone wishing to be considered for an award must send an abstract to the respective award committee chairperson in order to be considered. An abstract must be sent to the chairperson by January 31, 2014.

Preliminary Presentation Instructions

Oral presentations are allotted 15 minutes and must be in PowerPoint format on a USB memory drive. **Posters** should fit in a 46" x 46" space and will be displayed for an entire day (Thursday or Friday). Presenters should be prepared to stand with their posters for a designated one-hour period.

If you have any questions, please contact Program Chair, Howard Neufeld, neufeldhs@appstate.edu.

CHANGE IN ASB BYLAWS APPROVED BY THE EC

ASB Interim Executive Committee Meeting September 14, 2013

Proposal — That the Association of Southeastern Biologists establish a Treasury Office based on the same concepts that led to the establishment of the Archives Office. The Office would have two members, the Treasurer and an Associate Treasurer, each of whom would serve a three year term. When the Treasurers' term expires, the Associate Treasurer becomes the Treasurer. The outgoing Treasurer may elect to become a candidate for the vacated Associate Treasurer position. If he or she declines candidacy for Associate Treasurer, then the Nominating Committee will find at least one candidate for the office. Each election of a new Associate Treasurer would require only one candidate.

Bylaws — Changes would be required in the Bylaws to accommodate this change

Present Reading

Article II - Election of Officers

Section 7. A Secretary and a Treasurer shall each be elected for a 3-year term and shall be eligible for reelection.

Article III - Duties of Officers

Section 6. The Treasurer shall receive and disburse all funds of the Association, keep records of dues received and funds expended, serve ex officio as Business Manager of *Southeastern Biology*, and report the activities of the office annually to the membership. He/she is authorized to reimburse the Secretary for expenses incurred in attending the Annual Meeting and interim meetings of the Executive Committee and may be authorized by the Executive Committee to reimburse other officers for expenses incurred in attending one Executive Committee meeting per year.

Proposed Reading

Article II - Election of Officers

Section 7. A Secretary shall be elected for a 3-year term and shall be eligible for reelection.

Section 8. An Associate Treasurer shall be elected for a 3-year term. At the close of her or his term of office, the Associate Treasurer shall become Treasurer, serve a 3-year term, and then may elect candidacy for the office of Associate Treasurer. The Associate Treasurer shall become Treasurer in the event that the Treasurer can serve no longer.

Article III - Duties of Officers

Section 6. The Treasurer shall receive and disburse all funds of the Association, keep records of dues received and funds expended, serve ex officio as Business Manager of the Association of Southeastern Biologists, and report the activities of the office annually to the membership. He/she is authorized to reimburse the Secretary for expenses incurred in attending the Annual Meeting and interim meetings of the Executive Committee and may be authorized by the Executive Committee to reimburse other officers for expenses incurred in attending one Executive Committee meeting per year. The Treasurer shall keep the Associate Treasurer advised of all transactions of the office.

Voting to approve/disapprove will take place at the Friday, April 4, 2014 Business Meeting.

Constitution of the Association of Southeastern Biologists

Article I - Organization

Section 1. The name of this organization shall be The Association of Southeastern Biologists.

Section 2. The purpose of this Association shall be to promote the advancement of Biology as a science by encouraging research, the imparting of knowledge, the application of knowledge to the solution of biological problems, and the preservation of biological resources.

Article II - Membership and Dues

Section 1. Membership shall be open to all persons interested in the biological sciences.

Section 2. Membership shall be granted to any eligible individual, institution, or corporation upon receipt of a written application and dues payment for the current year.

Section 3. Each member shall pay annual dues in accordance with her/his category of membership. Annual dues include online access to *Southeastern Biology* and eligibility for subscriptions at reduced costs to other journals sponsored by the Association.

Article III - Officers

Section 1. The Officers of the Association shall be the President, Vice President, President-Elect, Past President, Secretary, and Treasurer.

Section 2. The term of office is 3 years for the Secretary and Treasurer, 2 years for the President and Past President and 1 year for the other offices.

Article IV - Executive Committee

Section 1. The officers of the Association, six (6) Members-at-Large elected by the membership, the Print Editor of *Southeastern Biology,* the Membership Officer, the Web Editor of ASB, and the Archivist of the Association shall constitute the Executive Committee. The Journal and Web Editor, Membership Officer, and Archivist shall be ex officio, nonvoting members with the right to discuss all issues and to propose motions. Members-at-Large shall serve terms of 3 years with two members elected each year.

Section 2. The Executive Committee shall meet in the fall of each year and in the spring during the Annual Meeting of the membership.

Section 3. The Executive Committee shall serve additionally as the Corporation's Board of Directors.

Article V - Annual Meeting

Section 1. The Annual Meeting of the Association shall be held in April at such place as may be recommended by the Executive Committee

and approved by the membership. The date of the meeting shall be determined by the Executive Committee.

Section 2. The Executive Committee may change the time and place of the Annual Meeting and may call special meetings of the Association.

Section 3. Notice of all special meetings shall be sent to each member at least two (2) weeks before the dates on which such meetings are to convene.

Section 4. Fifty (50) members of the Association shall constitute a quorum for the transaction of business at the Annual Meeting or at any special meeting.

Article VI - Disposition of Property

In the event of the dissolution or termination of the Association of Southeastern Biologists, title to and possession of all assets of the Association shall be assigned forthwith by the Executive Committee to a non-profit organization similar to the ASB in its overall goals or other biological organizations operated exclusively for charitable, educational, or scientific purposes.

Article VII - Incorporation

The Association of Southeastern Biologists is incorporated as a non-profit scientific, and educational organization without capital stock and one solely engaged in lawful activity as permitted by Section 501(c)(3) of the Internal Revenue Code of 1954, as amended, and by Chapter 55A-86 of the General Statutes of the State of North Carolina. No member shall have any title or interest in the property of the Association, and no dividends or profits shall be declared or paid to any member.

Article VIII - Audit

Section 1. The fiscal year for the Association is January 1 through December 31.

Section 2. The financial records of the Treasurer and of the Board of Trustees of the Enrichment Fund shall be audited at least once each year by an external auditor approved by the Executive Committee and which audit will then be approved and signed by the president at the annual meeting in April.

Article IX - Archives

Section 1. Documents to be archived shall be collected by the Archives Office consisting of an Archivist, Associate Archivist, and Assistant Archivist. The Archivist shall serve a 2-year term and may at the President's Section 1. Documents to be archived shall be collected by the Archives Office consisting of an Archivist, Associate Archivist, and Assistant Archivist. The Archivist shall serve a 2-year term and may at the President's discretion, and Executive Committee's concurrence, be reappointed as Assistant Archivist as the present Assistant assumes the office of Associate Archivist and the present Associate becomes the Archivist.

Section 2. The Archives of The Association of Southeastern Biologists shall be maintained permanently at the University of Georgia, Athens, Georgia.

Article X - Amendements

Section 1. This Constitution may be amended at any Annual Meeting by a three-fourths majority of those present, provided due notice has been sent by the Secretary to the membership at least 30 days in advance of the meeting, provided the amendment has been proposed by the Executive Committee or by a committee authorized by the Association at a previous Annual Meeting, and provided that so long as the Association shall be or remain an organization exempt under Section 501(c)(3) of the Internal Revenue Code of 1954, as amended, no amendment shall be made to Article I, Article VI, or Article VII of this constitution without consent having been obtained from the Internal Revenue Service and having been reported to the North Carolina Department of State.

Section 2. Amendments to this constitution shall take effect as soon as adopted by vote of the membership.

Revised September 18, 2013

Bylaws of the Association of Southeastern Biologists

Article I - Membership and Dues

Section 1. Annual dues shall be set by the membership on recommendation by the Executive Committee for the following categories of regular membership: Individual, Student, Sustaining, Contributing, Family, Life, Emeritus, Patron, and Library.

Section 2. Any member who has been a regular member of the Association for 10 or more consecutive years and who has retired from professional duties may be elected to Emeritus membership by the Executive Committee. An Emeritus member shall have the same rights and privileges as a Regular Member.

Section 3. Any individual or organization that contributes funds each year, in an amount set by the Executive Committee and approved by the membership, to sponsor an ASB award or otherwise support the Association shall be known as a Patron Member of the Association.

Section 4. Any organization with a focus on the biological sciences may become an affiliate of the Association of Southeastern Biologists upon recommendation of the Executive Committee and approval of the membership attending the annual meeting. Affiliation does not confer individual membership in the Association on the members of the affiliated organization.

Section 5. Annual renewal of membership shall require the payment of dues by the first of January. Any member with dues in arrears on the first of July shall be dropped from the membership roster. Members must pay past dues to maintain continuous membership.

Article II - Election of Officers

Section 1. The Nominating Committee shall prepare annually a multiple slate of nominees for each office to be filled. Members may recommend to the Nominating Committee persons for any office.

Section 2. The slate of nominees shall be presented to the membership prior to the Annual Meeting, and the election shall be held during the business session of the Annual Meeting. Nominations will be received from the floor.

Section 3. The Secretary shall prepare ballots which shall be distributed and collected by three tellers appointed by the President. A majority vote will constitute election to office. Where more than one person is to be elected to a position (e.g., Members-at-Large of the Executive Committee), the two or more receiving the highest number of votes shall be declared elected.

Section 4. During the Annual Meeting, those elected shall be presented to the membership. All ballots shall be deposited with the Secretary who shall retain them for 1 year.

Section 5. A President-Elect shall be elected every other year and shall serve a 1-year term, then a 2-year term as President and a 2-year term as Past President.

Section 6. A Vice President shall be elected annually. Neither the President nor the Vice President shall be eligible for reelection for the year following her/his term of office.

Section 7. A Secretary shall each be elected for a 3-year term and shall be eligible for reelection.

Section 8. The Treasurer and an Associate Treasurer shall comprise the Treasury Office. An Associate Treasurer shall be elected for a 3-year term. At the close of her or his term of office, the Associate Treasurer shall become Treasurer, serve a 3-year term, and then may elect candidacy for the office of Associate Treasurer. The Associate Treasurer shall become Treasurer in the event that the Treasurer can serve no longer.

Article III - Duties of Officers

Section 1. The President shall be the executive officer of the Association and chair of the Corporation Board of Directors, for a 2-year term, and shall perform the duties usual to the office. He/she shall appoint, with the advice of the Executive Committee, regular committees, special committees authorized by the Executive Committee, and where appropriate, Association Representatives to other organizations. The President shall approve and sign the external audit at the annual meeting. The President shall notify Emeritus members of their election.

Section 2. The President-Elect shall serve a 1-year term during which her/she will keep in close contact with the President and Past President and in effect study the Presidency. In the event that the President-Elect cannot complete her/his term of office, the person who received the next highest number of votes shall become President-Elect. If this person is unable to serve, the Executive Committee shall nominate two candidates for the office, one of whom would be elected by the membership by mail ballots.

Section 3. The Past President shall serve a 2-year term, and in order to provide continuity in the governance of the Association, shall serve as advisor to the President on matters of past policy. He/She shall serve as Chair of the Resolutions Committee, Nominating Committee, and of the Past Presidents' Council.

Section 4. The Vice President shall serve a 1-year term and shall be the public relations officer of the Association. He/ she shall organize the program for the plenary of the Annual Meeting. In the absence of the President from any meeting, the Vice President shall discharge the duties of the office, and in the event that the President cannot complete her/his term of office, the Vice President shall become President of the Association.

Section 5. The Secretary shall keep records of the meetings of the Association and of the Executive Committee, conduct routine business pertaining to the office, prepare and distribute ballots, serve ex officio as Associate Editor of *Southeastern Biology,* and report the activities of the office to the Association at the Annual Meeting. In the absence of the Treasurer, the Secretary shall

assume the duty to authorize by signature any financial transactions belonging to the Treasurer's office.

Section 6. The Treasurer shall receive and disburse all funds of the Association, keep records of dues received and funds expended, serve ex officio as Business Manager of *Southeastern Biology*, and report the activities of the office annually to the membership. He/she is authorized to reimburse the Secretary for expenses incurred in attending the Annual Meeting and interim meetings of the Executive Committee and may be authorized by the Executive Committee to reimburse other officers for expenses incurred in attending one Executive Committee meeting per year. The Treasurer shall keep the Associate Treasurer advised of all transactions of the office.

Article IV - Southeastern Biology

Section 1. *Southeastern Biology,* the official publication of the Association, shall be published quarterly online or at other regular intervals as may be determined by a vote of the membership upon recommendation by the Executive Committee.

Section 2. The Journal Editor, responsible for editing and online publishing ***of*** *Southeastern Biology,* shall be a member of the Association appointed by the Executive Committee for a term of 3 years. He/She shall be eligible for reappointment for successive 3-year terms.

Section 3. Upon the recommendation of the Journal Editor, the Executive Committee may appoint an Associate Editor who would assist the Journal Editor in matters related to the online publication of the journal, a News Editor who would assist the Journal Editor in obtaining news of biology in the Southeast, and other editors as needed."

Section 4. *Southeastern Biology* shall be available online to all members of the Association.

Section 5. Major changes in editorial policy proposed by the Journal Editor shall be subject to approval by the Executive Committee.

Article V - ASB Web Page

Section 1. The Association shall maintain an official ASB Web page on the Internet. The ASB Web page shall contain information about ASB officers and the Executive Committee, information concerning the Annual Meeting, news of ASB activities, information of interest to biologists in the southeast, and links to Internet sites of interest to the membership.

Section 2. The ASB Web page will be administered by the ASB Web Editor. The Editor of the ASB Web page shall be a member of the Association, responsible for the editing and publishing of the Web page, and shall be selected and appointed by the Executive Committee for an indefinite term. The Editor shall be eligible for reappointment for any number of successive 3-year terms.) The official title shall be Web Editor.

Article VI - Executive Committee

Section 1. The Executive Committee shall be in charge of the affairs of the Association and shall direct the expenditure of the Association's funds. The committee shall establish the policies for the Association with the approval of the membership and shall record all policies in effect in the "Leadership Guide for Officers and Committee Members."

Section 2. The Members-at-Large are eligible for reelection. Should a Member-at-Large leave office prior to expiration of the term, the Executive Committee shall appoint a replacement to serve until the next election.

Section 3. The President with approval of the Executive Committee shall establish an Archives Office consisting of an Archivist, Associate Archivist, and assistant Archivist each serving a 2-year term. At the close of the Archivist's term, the Associate Archivist assumes that position, and the Assistant becomes the Associate Archivist. The President and Executive Committee can reappoint the former Archivist to the position of Assistant Archivist or appoint someone from the membership to fill that position.

Section 4. The Archives Office shall be custodian of the permanent records or archives and, with the approval of the Executive Committee, make appropriate arrangements for the collection, care, and maintenance of such records.

Section 5. The Executive Committee shall appoint a Membership Officer who shall work closely with the Treasurer and be in charge of all membership-related duties and records including maintaining a membership database. The Membership Officer shall serve a term of 3 years corresponding with the Treasurer's term and shall be eligible for reappointment for successive 3-year terms.)

Section 6. For all meetings of the Executive Committee seven voting members shall constitute a quorum.

Section 7. Serving as the Corporation Board of Directors, the committee shall report to the North Carolina Department of State any changes in specific articles of the Constitution, viz., Article I, Section 2., Article VI, and Article VII that treat the Association's Purpose, Disposition of Property, and Incorporation, respectively. The Board may change its registered office or registered agent by notifying the North Carolina Department of State within 60 days after such change takes effect.

Article VII - Standing Committees

Section 1. The following standing committees shall serve the Association:

A. Committee on Human Diversity
B. Conservation Committee
C. Education Committee
D. Finance Committee
E. Graduate Student Support Award Committee
F. Annual Meeting Arrangements Committee
G. Meritorious Teaching Award Committee
H. Nominating Committee

I. Past Presidents' Council
J. ~~Place of Meeting Committee~~ ***Deleted 10/1/2011***
K. Poster Awards Committee
L. Publications Committee
M. Resolutions Committee
N. Senior Research Awards Committee
O. Student Research Awards Committee
P. Microbiology Awards Committee
Q. Membership Benefits Committee

Section 2. Committee members, except for those who serve ex officio, shall be appointed by the President upon the approval of the Executive Committee. The composition and duties of the standing committees shall be as follows:

A. The Committee on Human Diversity shall promote career opportunities in the biological sciences for women, minorities, and individuals with disabilities and implement programs to eliminate barriers that restrict the access of underrepresented groups to biological careers. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.
B. The Conservation Committee shall accumulate facts about environmental issues; shall, where it deems appropriate, disseminate such information to the membership; and shall bring resolutions addressing issues of significance to the Executive Committee for presentation to the membership through the Resolutions Committee. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.
C. The Education Committee shall explore ways and means by which the Association might contribute to improved biological education at all levels. Where feasible, the committee shall organize symposia and workshops for the Annual Meeting designed to acquaint the membership with new pedagogy and critical issues in biological education. The committee shall consist of six members appointed for terms of 3 years, with two members appointed annually and serving as Co-Chairs in the third year.
D. The Finance Committee shall review the finances of the Association, prepare budget projections for future years, and recommend actions regarding dues structure and other financial matters to the Executive Committee. The committee shall consist of the ASB Treasurer (Chair), Past President, President-Elect, and a member of the Executive Committee.
E. The Graduate Student Support Award Committee shall make monetary awards to assist graduate students to attend the Annual Meetings of ASB. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.
F. The Annual Meeting Arrangement Committee shall assist the

Meetings Coordinator in meeting audiovisual needs, arranging field trips, and managing the silent auction. The committee shall consist of the Meetings Coordinator as permanent chair, two members from the host institution, and three members appointed by the President for terms of 3 years, with one member appointed or reappointed annually.

G. The Meritorious Teaching Award Committee may each year select for the award a member of the Association who has taught biology for at least ten years in any college or university represented in the Association and has been a member of the Association for at least ten years. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.
H. The Nominating Committee shall, with due consideration of suggestions received from the membership, prepare a multiple slate of nominees for each office to be filled. The committee shall consist of three members, one of whom is a recent past president who shall serve as the Chair.
I. The Past Presidents' Council, composed of the Past Presidents attending the Annual Meeting with the current Past President serving as Chair, shall review and discuss major issues under consideration by the Executive Committee and, where appropriate, shall share its consensus view with the Executive Committee on the resolution of these issues.
J. ***Deleted 10/1/2011***
K. The Poster Awards Committee may each year select a recipient of the Association Poster Award for the meritorious presentation of original research by members at the Annual Meeting. The Committee shall consist of six members appointed for terms of 3 years, with a member appointed annually and serving as Co-chairs in the third year.
L. The Publications Committee shall provide oversight of the Association's publications, consider requests for special publication activities, and recommend any alteration of publication policy to the Executive Committee for approval and subsequent approval by the membership. The committee shall consist of three of the Members-at-Large of the Executive Committee and the Editor (ex officio).
M. The Resolutions Committee shall formulate and, with approval of the Executive Committee, present to the membership such resolutions as may be considered worthy of action by the Association. The committee shall be served by the Past President as Chair and two additional members with terms of 1 year.
N. The Senior Research Awards Committee may each year select a recipient of the Association Senior Research Prize for the meritorious presentation of original research by a member (student members excluded) at the Annual Meeting. The committee shall consist of three members appointed for terms

of 3 years, with a member appointed annually and serving as Chair in the third year.

O. The Student Research Awards Committee may each year select the recipients of the Association Student Research Prizes for the meritorious presentation of original research by a student member at the Annual Meeting. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.

P. The Microbiology Awards Committee may each year select a student or senior member of ASB to receive the Microbiology Award for the meritorious presentation by a senior member at the Annual Meeting. The recipient must have been a member of the Association for at least four years. The committee shall consist of three members appointed for terms of 3 years, with a member appointed annually and serving as Chair in the third year.

Q. The Membership Benefits Committee shall assist the Membership Officer in the development and implementation of member benefits, and in the recruitment and retention of members. The committee shall consist of the Membership Officer (Chair) and three (3) members appointed for terms of three (3) years, with one a member appointed annually.

Article VIII - The Annual Meeting

Section 1. An Annual Meeting, hosted by colleges, universities, or scientific institutions throughout the Southeast, shall be convened in April for the purposes of conducting Association business; sharing scientific information through symposia, paper and poster sessions, and workshops; and strengthening social and professional ties among Southeastern biologists.

Section 2. All titles and abstracts of papers and posters submitted for the program shall be in the offices of the Local Arrangements Committee by the date set by the Editor and shall be presented according to the guidelines in the published Call for Papers.

Section 3. The maximal time period for the presentation of papers shall be established by the Local Arrangements Committee, and the Chairs of the paper sessions will enforce the established time period.

Section 4. Papers presented at the Annual Meeting shall be read by members or persons introduced by members.

Article IX - The Enrichment Fund

Section 1. The Association shall maintain an Enrichment Fund to support long- and short-range objectives to advance biological education through teaching and research. The specific objectives to be supported shall be designated by the Executive Committee and approved by the membership.

Section 2. The Enrichment Fund shall be under joint management of a Board composed of the Executive Committee and Finance Committee and guided by a Chair appointed by the President for a term of 3 years. This Board shall be responsible for the: prudent investment

of all Endowment Funds of the Association and for planning and directing the recruitment of funds from the membership and external sources. The Chair shall report the current status of the Enrichment Fund to the Association at the Annual Meeting.

Section 3. The Board shall receive and administer bequests and other property from any source and shall have the authority to buy, sell, exchange, lease, transfer, or otherwise dispose of any property, real or personal, with respect to the Enrichment Fund.

Section 4. Bequests and gifts without specific designation (General Fund) shall be designated by the Board for any established educational objective of the Association. Bequests and gifts received for specific purposes shall be either applied directly to the intended purpose (Restricted Funds) or placed in an Endowment with only the annual earnings applied to the intended purpose in accordance with the wishes of the donors. Endowments may be named in honor or memory of individuals or for the intended purpose and may be established for existing educational objectives or others approved by the Board.

Section 5. Income Allocation - The General Fund, Restricted Funds, and Endowments shall be allocated income at the end of the fiscal year based on the average balance of each fund in the total amount of Enrichment Funds invested for that year.

Section 6. Investment Policy - In order to protect the contributions to the Enrichment Fund for their intended objectives, the Board shall strive to invest funds only in conservative investment vehicles offering the highest interest rates or earnings at the time of purchase. Since changes in the economy and other factors greatly affect interest rates and earnings, funds shall be invested up to a period of 5 years unless otherwise approved by the Board.

Section 7. An audit of the Enrichment Fund shall be made at the close of each fiscal year by an external auditor and which audit will then be approved and signed by the president at the annual meeting in April.

Article X - Amendements

Section 1. These bylaws may be amended at any Annual Meeting of the Association by a two-thirds majority vote of those present.

Section 2. Amendments to these bylaws shall take effect at the close of the meeting at which they were adopted.

Revised September 18, 2013

ASSOCIATION OF SOUTHEASTERN BIOLOGISTS EXECUTIVE COMMITTEE MEETING WEDNESDAY, 10 APRIL 2013 CHARLESTON, WEST VIRGINIA

ATTENDANCE: 16 individuals attended the meeting

NAME	CAPACITY
Don Roush	President
Zack Murrell	President-Elect
Rebecca Cook	Vice President
Patricia Cox	Past President
Conley K. McMullen	Secretary
Tim Atkinson	Treasurer
Sarah Noble	Membership Officer
John Herr	Archivist
Irena Kokkala	EC Member-at-Large
Ashley Morris	EC Member-at-Large
Roland Roberts	EC Member-at-Large
Bill Ensign	EC Member-at-Large
Judy Awong-Taylor	EC Member-at-Large
Christi Magrath	Tri-Beta Representative
James Caponetti	Journal Editor
Scott Jewell	Meetings Coordinator

I. Call to Order and Welcome – President Don Roush called the meeting to order at 1:20 P.M., welcomed the Executive Committee (EC) members, and thanked everyone for attending. Don made special mention of President-Elect Zack Murrell's assistance over the past year.

Motion 1. Jim Caponetti made a motion to approve the agenda for today's meeting. Roland Roberts seconded, and the motion carried.

II. Approval of the EC Meeting Minutes from 22 September 2012

Motion 2. Jim Caponetti made a motion that the minutes from the 22 September 2012 EC meeting in Concord, NC be approved as written. Zack Murrell seconded the motion. The motion carried.

III. Officers and Executive Committee Reports

A) President (Don Roush) – Don reported that as he was concluding his term as President of ASB, he continued working on several issues involving ASB Committees including the annual place of meeting and program. The final adoption of *Southeastern Naturalist* as a member benefit was put into place and members can now indicate subscription

on their member renewal forms. Progress on the second ASB journal continues with the first issue to be published online in the near future. Review of the archivist position has been made with a new transition format for the position, which should be approved at the Business Meeting on Friday. Don mentioned that he had worked to make arrangements for the newest ASB Fellow, Peter Raven, to attend and be recognized at the Wednesday evening plenary session. Don also mentioned that due to health issues and on-going computer issues, he had relied on President-Elect Zach Murrell to assist in his duties as President. Don stated that he had contributed a presidential "view from here" article for two issues of *Southeastern Biology*.

B) President-Elect (Zack Murrell) – Zack reported that this had been a year of transition for him, and that with the help of the ASB EC, he had learned a great deal of what makes ASB work. Zack mentioned that in phone meetings and emails over the past year, the EC has made some strides towards conducting a strategic plan for ASB in 2013-2014. Zack stated that he believes it is critical to continue our transition to a conventioneer managed meeting and that we need to continue to make changes to fit the new paradigm. Zack also updated the EC on planning for future meeting sites. Discussion followed regarding the functioning of the Annual Meeting Arrangements Committee.

C) Past President (Patricia Cox) – Patricia stated that during her second year as Past -President, she was chair of the Nominating and Resolutions committees. Patricia also advised President-Elect Zack Murrell, when needed, participated in the monthly EC phone calls and assisted the Program Committee with edits to the abstracts and program-at-a-glance. Patricia also assisted Meetings Coordinator Scott Jewell with organizing volunteers. Once again this year, Patricia volunteered to organize the silent auction with the help of past ASB officers, Eloise Carter, Bonnie Kelley, Diane Nelson, Pat Parr and Kim Tolson.

D) Vice President (Rebecca Cook) – Rebecca reported that the plenary speaker for this year is Meredith Blackwell of Louisiana State University. Rebecca will be introducing the plenary speaker this evening.

E) Secretary (Conley K. McMullen) – Conley reported that he began his third year as Secretary at the Spring Executive Committee (EC) Meeting held Wednesday, 4 April 2012 in Athens, GA. Since that time, he has worked with President Don Roush on a variety of ASB matters and communications, including the minutes from the EC meetings in April (Wednesday and Saturday), the ASB Business Meeting in April, and the Interim EC Meeting in September. Conley stated that in preparation for the 2013 meetings, he coordinated submission of the 2012-2013 Officer Reports, Appointed Position Reports, and Committee Chair Reports; and that he made 20 copies of each of these reports for circulation at this year's EC meeting. He also prepared certificates and letters of thanks for outgoing Officers and Committee Chairs. Conley thanked members of

the EC for their help over the past three years and offered to help the new Secretary in any way possible to assure a smooth transition.

F) Treasurer, Business Manager (Tim Atkinson) – Tim circulated a handout with the details of his report, and stated that there would be a more detailed report at the Business Meeting on Friday. Discussion followed regarding the challenges of maintaining non-profit status for the Society. Tim reported that the Enrichment Fund is in very good shape this year, as Meetings Coordinator Scott Jewell devised a way to get EF donations during registration. During 2012, the EF received $6,931 in contributions, with $6,126 of this received during registration of the 2012 annual meeting. The ending balance as of 31 December 2012 was $39,026. Discussion followed. President-Elect Zack Murrell emphasized the need to reactivate the Enrichment Fund. Tim also reported that at the end of fiscal year 2012, ASB showed a net increase of $3,716, with an ending balance of $52,839.

G) Tim reported that last year's meeting in Huntsville, AL, was profitable, but we had other bills to pay including software bills, etc. Discussion followed. As of today, the Enrichment Fund totaled $37,410. This resulted in large part from Scott Jewell providing opportunities for members to contribute online. Also, as of today, the ASB account is $158,800. It appears that ASB will come out of this year's meeting in good shape.

H) Enrichment Fund Board Chair (Mike Dennis) – President Don Roush reported for Mike. Don mentioned the ribbons that are presented for each level of donation, and stated that some of these levels will be recognized at the Friday evening banquet.

I) Archivist (John Herr) – John stated that all reports received were categorized, and one new category was established, viz., Series 7: 7.4 - *Special and Unreported Events in the Life of the Association*. Accumulated archive items were taken to the Hargrett Library, University of Georgia, and the "Book of Fellows" was checked out so that it could be taken to the 2013 Annual Meeting of the Association in Charleston, WV where Peter Raven, a newly appointed fellow, will sign his page in the Book. John mentioned that extra effort was put forth to obtain reports and other documents which should have been sent to the Secretary and Archivist. Discussion followed regarding future access of archive items.

J) Journal Editor (Jim Caponetti) – Jim reported that the four regular issues of Volume 59, 2012 plus the April supplement of the ASB history by John Herr are online at the ASB website. Meetings Coordinator Scott Jewell has made arrangements with FedEx Office to print and bind copies of the five issues for the typeset and the archives. The John Herr history and the many illustrated events in the October issue made the annual meeting appear to be a memorable 75th anniversary event. Many thanks go to photographer Megan Kellogg for fantastic pictures. This year's

invited research paper is by Dr. Kenneth Shull, and it appeared in the January, 2013 issue.

K) Web Editor (Ashley Morris) – Ashley stated that her major report is about our new mobile application. Chris Fleming is responsible for putting these together (droid app and apple app). Ashley also mentioned that she had revamped our web site, which has had over 3000 visits since January. This visitation rate is fairly consistent with last year. Interestingly, the majority of activity is NC, GA, and TN. Usually, most visits come from the state where the annual meeting is happening. That is not the case this year. Ashley reported to the EC that she may ask Chris to be permanent assistant with "app" development, and she expressed thanks to Chris for his work. Meetings Coordinator Scott Jewell obtained the QR form for downloading this year's program, etc. Finally, Ashley reported that we have 497 likes on Facebook.

L) Book Review Co-Editors (Christopher G. Brown, Jennifer R. Mandel) – Christopher and Jennifer's written report stated that they had received no books to review this year and would like to make it easier for authors/publishers to contact them for potential reviews and for them to contact potential reviewers. Also, they suggested that ASB might benefit from a link on the website or other forum where we could publish reviews. They also suggested that perhaps we should include new textbooks in this process, since teaching is an important focus of ASB. They stated that they would like to see reviews of texts by professors that have used them.

M) News Editor (Ricky Fiorillo) – No report. President Don Roush posed the question of whether we need this position, especially with Facebook and other electronic means of communication. Discussion followed.

N) Membership Officer (Sarah Noble) – Sarah reported that C. Richie Bell, Wallace D. Dawson, George C. Kent, Frank Romano, and Stephen L. Timme had passed since our last Annual Meeting. Sarah also mentioned that she had received two requests for emeritus status: William F. Font and Patricia Parr.

Motion 3. Secretary Conley McMullen made a motion to put William F. Font and Patricia Parr forward for emeritus status. The motion was seconded by Roland Roberts. There was no discussion. The motion carried. These individuals will be voted on at the Friday business meeting.

O) Meetings Coordinator (Scott Jewell) – Scott reported that 614 individuals had preregistered for this year's meeting, but that we are hoping for 800. Further, we are presently at breakeven regarding the budget for this year's meeting. Scott also mentioned that the accommodations this year were very nice, and that he had acquired the convention space at no charge. Shuttles were also acquired for free, except for drivers' pay. Scott recognized Ashley Morris and Chris Fleming for this year's

program "app", which is needed to attract younger members. Scott also emphasized that it had been a true joy working with Howie Neufeld on the Program Committee. President Don Roush seconded these sentiments. Scott also mentioned that working with Judy has been dynamite, and that he would love to see more of the types of efforts exhibited by Howie, Judy, and others!

IV. Committee Reports

A) Annual Meeting Arrangement Committee (Scott Jewell) – The 2014 Annual Meeting will be held in Spartanburg, SC. Scott mentioned that space will be tight, but that we will be fine. Everything is ready to go at the Marriott. The 2015 Annual Meeting will be held in Chattanooga, TN. Scott reported that he had just finished finalizing agreements.

B) Nominating Committee (Patricia Cox) – The nominating committee was composed of Patricia Cox (chair), Patricia Parr and W. Michael Dennis. Information on each candidate was gathered and submitted to SEB for publication. The nominees are as follows:

Vice President
Joey Shaw - University of Tennessee at Chattanooga
Victoria Turgeon - Furman University
Secretary
Sarah Noble - University of Mobile
Members-at-Large
Leon Jernigan - University of North Carolina at Pembroke
Margaret (Peggy) Kovach - University of Tennessee at Chattanooga
Edgar Lickey - Bridgewater College
Conley McMullen - James Madison University

C) Resolutions Committee (Patricia Cox) – Patricia distributed, and read to the members of the EC the resolution of appreciation regarding this year's meeting at Charleston, WV.

Motion 4. Motion by Committee to accept the resolution with one editorial correction that will be made by Patricia, no second needed. This will be voted on by membership at the Friday Business meeting.

D) Program Committee (Howie Neufeld) – Howie mentioned that he and the other committee members would be pleased to remain on the committee for another year. Discussion followed regarding programming issues.

E) Publications Committee (Roland Roberts) – Submissions for the first issue of *Eastern Biologist* have been sent to the editorial board. Roland mentioned that Joerg-Henner Lotze had questioned the committee about whether the journal title had been appropriately selected, as he believes that the title of a journal drives submissions. This might explain the low number of submissions so far. The number of issues may be adjusted to

reflect this. Discussion followed. President Don Roush inquired about need for more editorial board members.

F) Microbiology Research Awards Committee (Michael Land) – President Don Roush mentioned that Michael had contacted him regarding the situation that prevented him from attending this year's meeting and acting as a judge. Don also shared that there are four papers that need to be judged. Treasurer Tim Atkinson mentioned that all four individuals are current ASB members.

G) Graduate Student Support Committee (Michael Gangloff) – No report. President-Elect Zack Murrell mentioned the number of applications that had been submitted and the number awarded (20).

H) Finance Committee (Tim Atkinson) – No report.

I) Database Management (Tim Atkinson) – Tim reported that a new database manager, Patricia Cox, has been appointed.

J) Committee on Human Diversity (Marilyn Pendley) – No report. President Don Roush stated that Marilyn had been hard at work and will be hosting a luncheon, and that Meredith Blackwell will be speaking at the luncheon. Treasurer Tim Atkinson mentioned that Lafayette Frederick will speak at next year's luncheon.

K) Education Committee (Kirk Stowe) – Kirk reported that at the last meeting (2012), the committee had discussed two problems; that those in a PhD program are rarely instructed in teaching and those in secondary education are rarely instructed in research. To this end, the committee discussed having a roundtable regarding graduate students learning how to teach and secondary teachers learning how to conduct research and how this gap might be bridged. This seems to be something that is missing at most of our institutions. Toward this end, the committee has several professionals that are working in this area participating in a roundtable this year.

L) Meritorious Teaching Award Committee (Dwayne Wise) – The Meritorious Teaching Award Committee considered nominations of several persons for the MTA. One nomination and supporting letters was considered superior and, after discussion, the committee voted unanimously to grant the award to this nominee. The winner shall be announced at the Friday evening Awards Banquet.

M) Conservation Committee (Smoot Major) – No report.

N) Poster Awards Committee (Megan Gibbons) – No report.

O) Senior Research Award Committee (John Carr) – No report. President Don Roush mentioned that John had contacted him and told him that there had been a limited number of submissions, and one was a

committee member. Due to the latter consideration, an outside reviewer was used to make a final decision.

P) Student Research Awards Committee (Mac Alford) – The committee solicited and received submissions for the ASB Student Research Award and the Brooks/Cole Cengage Learning Student Research Award in Aquatic Biology. Mac reported that the committee received three submissions for the former, and one for the latter. The committee reviewed the submissions and agreed on the winners: Sheri Shiflett for the ASB Student Research Award and Madeleine Kern for the Aquatic Biology Award. Names of winners were provided to Ken Shull for production of plaques.

Q) Membership Benefits Committee (Sarah Noble) – Sarah reported that there were no changes to our benefits.

R) Committee on Bioinformatics (Zack Murrell) – Zack reported that the symposium titled "Workflows and Challenges in Digitization of Museum Specimens"
(co-sponsored by idigBio) is this year's highlight.

V. Affiliate Society Reports

A) AAAS (Tim Atkinson) – No report.

B) AIBS (Stephanie Songer) – No report.

C) NSCA (Alexander Krings) – Through an emphasis on advocacy and legislation, NSCA activities continue to benefit biological research collections and systematists associated with ASB in many ways. NSCA activities in Washington help increase visibility and funding for systematics research.

D) BBB SE District 1 & 2 (Christi Magrath) – At this, our 56th Annual Meeting, Tri- Beta has over 50 student presentations. Southeast District I and 2 have over 38 posters and 25 paper presentations. Southeast District 2 is the host district and Mu Epsilon/Troy University is the host institute. Christi Magrath is the hosting Director. Steve Coggin resigned as Director of Southeast District 1, and Lee Sutton from East Carolina University will serve as the new Director. Our Thursday field trip this year was to be a rafting trip but low pre-registration and the need to pre-pay for a minimal number of students led to cancellation. Tri-Beta is proud to be an affiliate organization of ASB, and we appreciate the support offered to students, faculty advisors, and other members.

E) SABS (Wendy Zomlefer) – No report.

F) BSA-SE (Zack Murrell) – Zack mentioned that a representative needs to be appointed to this position. Fourteen papers and five posters are being considered for this year's BSA award.

G) ESA-SE (Dean Cocking) – No report.

H) SWS (Christina Uranowski / David Bailey) – No report.

I) SHC (Alexander Krings) – No report. President-Elect Zack Murrell mentioned that we should we proud that SHC came out of ASB. The original group is now the Southeast Chapter of SHC. The SHC National Meeting will be held in New Orleans this year at the annual meeting of the Botanical Society of America.

VI. Old Business

A) Program Committee (Howie Neufeld) – Discussed above in Committee Reports.

B) Publications Committee (Roland Roberts) – Discussed above in Committee Reports.

C) AIBS Membership – It was agreed to continue membership.

D) Herr Award – President Don Roush will speak with submitters and request more information on nominees.

VII. New Business

A) Strategic Planning (Ashley Morris, Bill Ensign) – President Don Roush updated the EC on these efforts. Ashley mentioned "Good to Great", a book on what make companies great. "Good to Great in Social Sections" had good information on how best to fill necessary rolls in our Society. Ashley described pertinent ideas from the book. Discussion followed. Bill mentioned that we need to ask ourselves, what is our core? What do we do well? Bill suggested that the answer for us is education. Discussion followed. President-Elect Zack Murrell emphasized the need to discuss the logistics of strategic planning. Zack also posed the question; do we want to walk away from research-oriented universities? Ashley and Bill mentioned a survey that they will be circulating. Bill encouraged everyone to dialog with members about why they choose to attend our Annual Meeting. Treasurer Tim Atkinson stressed, "Ask our Members"; why do they come, what do they want?

B) Refund Policy Guidelines – This will be discussed at Saturday's EC meeting.

C) Meeting Volunteer Guidelines – President Don Roush addressed this below.

D) Regional Southeastern Vision and Change Workshop (Judy Awong-Taylor) – Judy mentioned that after this week's workshop, the next step will be to organize subgroups and regional conferences. Judy enquired

as to whether ASB would be willing to do convention work (organize and organize conference) for future Vision and Change activities. Discussion followed.

Motion 5. – John Herr made a motion that Judy's proposition be placed on the agenda for the Saturday EC meeting. Roland Roberts seconded. The motion carried.

E) Membership Issues (John Herr) – This will be discussed at Saturday's EC meeting.

F) Role of EC in ASB Planning (Don Roush) – Don emphasized that after we leave the EC meeting, we must all be positive and stand together, as doing otherwise drags us down as a Society. As an example, Don emphasized how not everyone appreciates how important Meetings Coordinator Scott Jewell and Treasurer Tim Atkinson are to our Society, and how we need to support them to the fullest. Discussion followed.

VIII. Announcements – Ashley Morris announced that she would be heading up a "grassroots" effort to raise money for the Enrichment Fund at this year's meeting.

IX. Adjourn

Secretary Conley McMullen made a motion to adjourn the meeting at 6:15 P.M. The motion was seconded by President-Elect Zack Murrell, and carried.

Respectfully submitted,

Conley K. McMullen, Secretary 2010-2013
29 April 2013

ASSOCIATION OF SOUTHEASTERN BIOLOGISTS
EXECUTIVE COMMITTEE MEETING
CHARLESTON, WV
13 APRIL 2013

Present: Tim Atkinson, Scott Jewell, Don Roush, Lee Sutton, Judy Awong-Taylor, Irene Kokkala, Bill Ensign, Ed Lickey, Joey Shaw, Jim Caponetti, John Herr, Sarah Marie Noble, Terry Richardson, Zack Murrell.

I. Call to Order and Welcome

Call to Order Zack, 8:45 AM (EDT)

II. New Business

A. Timeline development (See timeline handout)

Trying to move to three-year planning period, 2-yr for Chattanooga, 1-yr for Spartanburg. Feasibility of approving budget 2 years ahead?
Scott starts planning 3 and 4 years out. 2016, 2017.
Approval of future meeting site approval/disapproval.
Four year discussion scheduled for April meeting.
-Central Circle
-Going outside the circle

B. John Herr—State of ASB

Association of Southeastern Biologists perception of plight and suggestions

Revisited fox and hedgehog

Large v small institution. Larger institutions not going to work. Grad student ASB involvement discouraged by larger schools. $35/$50 for regional/national meetings. (Microscopy society) our meeting cost is comparatively high, even for students. Perceived better professional contact value in more specialized meetings. We have become a regional meeting that is national and international in many respects but are not as large as large ones. Bigger then most regional meetings.

Recommendation of a Chair for meeting, for protection of Scott.

Committee needs to be more responsible for good/bad.

ASB has developed a degree of respect from outside that we need to keep going forward with, we were a leading force in petition to establish NSF. ASB was key in its establishment.

John is of opinion that our Concord meeting has NASCAR conflict with our involvement toward global warming.

Host Institution change to Featured Institution: proposal go to Provost/ President instead of departmental head. Problem with Featured Institution, going

back five years later what do we do? The institutions have already been featured. Meeting space offered by institutions. Field trip of campus, symposia organized for on-campus.

Most important: we (EC) have got to be the recipients of grief, rather then people like Scott.

Suggested more contact with our Younger Sister: ANB.

Don suggests: Two from local institution, one to be co-chair of AMAC, an academic to work contact with the institution/departments/ person. Also, someone from the EC to act as Liaison between AMAC and EC (3 year term).

Tim: 1) which type participation do we want: a bio dept that is eager to participate or one that is told to participate.

2) EC needs to step up and support/defend Scott, publicly. Send complaints to EC.

Bill: suggested stationing an EC member at registration throughout meeting to deal with complaints. John suggests chair/co-chair fulfill duty.

Scott: needs to hear about nuts and bolts of meeting, so that he can enhance improve meeting. Select few people who continue to berate Scott and Tim. Support needed from EC, we need a formalized response. PhD to PhD, to deal with certain behaviors.

Bill: Motion to have John's Full Report put into minutes of meeting. *Added beginning on next page.*

Second: Don

Discussion: Scott wants best for ASB, willing to not go to Charlotte. New faces at this meeting not privy to discussion of meeting places, important to keep doing the best for our members, we need to unify, put our energies together, and do the best for ASB regarding meeting location. Scott cares about ASB. Don: Scott has a degree in biology and understands biology.

Zack has actively supported Scott regarding issues (what the 1% are saying, attacks on integrity). Tim: In the absence of a public statement from us, all the members hear is poison.

Zack: EC should take action. To be discussed on agenda for later.

The Association of Southeastern Biologists: A Perception of Its Plight And Suggestions for Its Progress in the 21st Century

John M. Herr, Jr.
ASB Archivist

My intention here is call attention to some real causes for the trend toward a significant decrease in membership for the Association that have not yet been enunciated over the course of ample discussion by the Executive Committee. I will also offer some suggestions, perhaps radical in nature, for at least leveling or even reversing this trend.

The central cause is the philosophical result of a marked change in the way many biologists view their science and their role in it since the founding of the Association in 1937. This change, one which mirrors the pattern of general evolution as we know it – the progressive advance from the generalized to the specialized, is clearly illustrated by the programs by which biologists were trained in the past as compared to the nature of training today.

From the 1930's to the late 1960's, students seeking an advanced degree in biology were expected to have a firm grasp of the portion of the field on which their studies were concentrated and a more generalized knowledge of the full breadth of biological science. Biological education included not only a broad approach to course work, but also comprehensive examinations toward the close of the degree program. In my own experience, my first comprehensive examination for a bachelor's degree in biology at the University of Virginia required a comprehensive written subjective examination on ten assigned classical biological books, e.g., "The Origin of Species by Means of Natural Selection" and two subjective questions provided from each course in my major program. Students who failed this examination in three attempts forfeited the degree. For the oral comprehensive examinations for my master's degree at UVA and Ph.D degree at UNC-Chapel Hill at least 10 biologists representing very diverse fields of study formed the examining committee, and I was judged on how well I answered the diverse collection of subject matter questions they posed. The nature of what I have described was the rule for most universities. Comprehensive examinations demanded a broad grasp of biological subject matter.

This climate, where biologists were generalized in their training, favored the establishment of our Association, and it is not surprising that the large universities were the leaders in that effort. The breath of training these institutions offered naturally promoted a rapport among parasitologists, physiologists, botanists, zoologists, etc. Such rapport has largely disappeared today, and I believe that the change toward a highly specialized training of biologists is the major cause. At my institution, the University of South Carolina, and probably at most large universities, the "Comprehensive Examination" still stands as a firm requirement, but the word "comprehensive" is vestigial – a misnomer; word without meaning. The subject matter of general biology or even of highly specialized biology is no longer a part of this examination. For both the master's and PhD degrees the student must write a research proposal for a project not related to her/his thesis research and then defend the proposal before

a small committee, five or fewer members that also serves to guide the student in her/his thesis research. The student passes the "Comprehensive Exam" when the proposal is altered with suggestions from the committee and adjusted toward the status of "likely to be funded".

Over the past several years, several graduate students at USC have attended, participated in, and enjoyed the annual meeting of our Association. All but one no longer attends because the highly specialized professors in my department continuously advise them *not* to join ASB. They encourage graduate students to attend small meetings in their specialty discipline, e. g, molecular biology, microbiology, etc. and they are advised that meetings of this type are much less expensive and far more professionally rewarding.

Participation in our Association by colleges and universities throughout the Southeast is in general rather low and especially minimal in the larger state and private universities. The Executive Committee must take steps to make the Association more attractive, and my suggestions for this outcome will markedly change or reverse current approaches. Consider the following recommendations.

1. The Meetings Coordinator should find the best venue, in terms of cost to ASB, *near* the *Featured* Institution, so that he can appeal to that institution to engage actively in the meeting and to provide us with space for some of our activities (e.g., the Thursday social and/ or the Friday Banquet; perhaps a room for one symposium). Selection of a *featured* institution that has a Convention Center on or near campus would stand as the best option. The two members on the Annual Meeting Arrangements Committee (AMAC) who represent the *featured* institution along with the Meetings Coordinator should engage appropriate administrators of the institution with an appeal for the institution's active participation in the meeting. These three members of the AMAC should be able to enlist some (much or little) assistance from the institution that would reduce the costs that burden ASB. For example, when ASB met at the University of South Carolina in 1986, the administration provided space for the Friday banquet free of charge. The Provost's office provided buses to carry those attending to the Thursday evening social event (again, free of charge). We must find ways to get those attending onto the host campus for a portion (large or small) of the meeting and to revive the idea that the host institution derives a prominent benefit for hosting ASB. The Chamber of Commerce in the host's community must be contacted early and educated as to the economic impact of our meeting. Our presence should be widely publicized.

This suggestion would reverse the trend that the meeting venue does not need to be near the featured institution as first done in 1974 when Georgia Southern hosted the meeting in Savannah rather than in Statesboro. The institution should be in "field trip" distance for at least a visit by folks on the way home on Saturday.

2. Elements of the annual meeting should be changed toward making the meeting less expensive. Perhaps, for example the Thursday Social could be changed to a gathering for beverages, hors d'oeuvres, and conversation, sans live music. Because attendance to the Annual Meeting has been more than satisfactory in recent years, the danger of the rising costs may be considered minimal. However, with the current financial challenges faced by colleges and universities, institutional support for faculty and students to attend expensive

meetings, already diminishing, may disappear altogether. Perhaps a reduction in costs could be realized by changing the "break even" circumstance from a minimum of 600-650 people attending to 750-800. My hope is that the theme of this essay will be accorded consideration by the Executive Committee. We should take serious note of and regard as dangerous the fact that for three years we have had a decline in annual meeting attendance and have had to extend the deadline for abstracts so to reduce the decline in abstract submission. We must reverse this trend.

Summary

1. ASB has agonized over the reality that the founding institutions of the Association, the larger, research universities, private and public are increasingly absent from representation in the membership and participation in the annual meetings. The agonizing should cease, since the cause is permanent. The highly specialized faculty and graduate students at large universities prefer small meetings concentrated in their specialties and in social association, if any, with their own kind. However, as noted in a recent meeting of the Executive Committee, the door should remain open—wide open to our colleagues at these larger institutions.
2. The search for membership should concentrate on liberal arts 2- and 4-year colleges and universities where excellence in teaching, service, and research are still valued. These institutions are the sources of the present membership, but gone almost unnoticed is the fact that they are much under-represented in our association.
3. *Featured* institutions and their municipalities must be made aware of the economic value for the region and prestige for the institution that the annual meeting of the Association offers. The Meetings Coordinator, and the two *featured* institution members that serve the Annual Meetings Arrangements Committee should convince the administration of the host institution and community leaders of this reality. In that recognition, the *featured* administration should conclude that an investment of space and/or funds in the meeting would be worthwhile.
4. Every method possible should be advanced to reduce the cost of the annual meeting. No mystery resides in the offering of zero costs for meeting space by hotels or convention centers that exact tremendous profit from food sales (e.g., lunches, the Thursday social, and awards banquet). Free meeting space because of food and lodging sales has been the rule in the past before ASB had a Meetings Coordinator. However, Scott reports that venue providers still try to add space costs to our bill in spite of the benefits they derive from food and lodging sales forcing him to walk away. Usually and fortunately, these venue providers associate a potential great loss with the sight of Scott's back as he walks away, and, accordingly, call him back.

Author's note: Throughout this document I have changed "Host Institution" to "Featured Institution" in recognition of Executive Committee's general concurrence with the idea that ASB should take the first step toward a stance of collegiality with institutions in the vicinity of our annual meeting. Put another way, we are emphasizing ASB's value to the institution rather than the institution's value to ASB."

C. Tri-Beta

Issues are timing of titles/abstracts and advertising to Tri-Beta.
1) Advertise in Fall for location and timeline
2) Clarify registration to the students.
3) Possible submission of titles, early
4) How to mesh βββ and ASB more effectively.

Discussion: Don: Better integration with PC by submitting titles earlier. Soonest money gets to βββ students is November, they can't submit until they have the funding. People are having issues following instructions.

Lee: Recognizing under current of separation of ASB/βββ.
Abstract/title submission together would solve some of the separateness. Judging presents a problem to integration of βββ with ASB.

Bill: βββ creates a separate track within the meeting.

Don: There has been a shift where the mentor can have name on presentation; pressure for T&P mentored vs. gave a presentation. 200+ βββ students come to meeting, βββ as a recruitment pool.

Zack: do we need an ad hoc committee to work on this?
Zack will talk with Lee and Christi over the next few months.

Tim: 1) βββ puts a lot of money into ASB.
2) Stars of βββ continue to shine throughout careers. Cultivating ground for future leaders. Engage someone from program committee.

Lee (via Don): Nearly 200 attendees 17 chapters 35 papers 55 posters presented by βββ.

D. Tim Atkinson Treasurer's Report

Due to circumstances and things he has been hearing: Requests a vote of confidence.
Motion by Bill to express confidence in Tim.
Second by Don. Withdrew
Motion by Bill to ask Tim to continue as Treasurer.
Judy: Second.
Discussion: Indicates very strong confidence in Tim, and appreciation for his work.
Jim: Tim is of utmost honesty and integrity.
Additional discussion followed.

Vote to ask Tim to continue as ASB Treasurer: All in favor 100% unanimous support of Tim by the EC. Zero opposition.

1. Electronic Treasurer Report to Membership
   Due to absence from Friday business meeting.
   E-mail, to membership, of standard detailed report as requested by two Past Presidents.
   Zack: Will work with Tim and Scott to compile the last 15 years of financial data.
   Tim: Membership reports in SEB each year, add to 15 years of financial data. Line by line to EC, and condensed report to Past Presidents (done by Don), on a monthly basis.

2. IRS Status
   Zack: do we need support through one of the NC Senators in this endeavor?
   No one is to do anything with tax status without approval from Tim.

   Tim: is targeting Fall EC meeting as goal of having tax status accomplished.
   Suggestion of auto-renewal for membership.
   Motion: Don
   Second: Jim
   Discussion: Notice to arrive as an e-mail receipt. Ability to opt out.
   Vote: Unanimously approved

E. Scott Jewell
   Overall report: Given.
   1. C-VENT functionality
      Electronic membership payment capabilities have been secured ($50/year).
      Membership online renewal is just a couple months away. Will be set up to run independently of registration.

   2. Refund policy
      For annual meeting: Is published.
      Direct people asking for refunds to the Refund Policy.
      Add mandatory acceptance of the terms of agreement, including refund policy, acceptance button to registrations.
      Joey: Recommended last day to apply for a refund e-mail.
      Tim: Add refund information to confirmation of registration e-mail.

   3. Wednesday night/Thursday night/Friday night costs
      Cost vs. profit
      Joey: Charge a few dollars for ASB App, Scott says we'd rather not.
      Scott: Program $7 online paper copy, & $10 for onsite paper copy.

      Wednesday Social: About 300 signed up for tickets to plenary session. 194 tickets for post-plenary social.

Food Quality: Past Presidents' Breakfast had problems.
Center plate has a reputation for good quality, but forgot to add the eggs.

Thursday night: Food was good. Scott works hard to accommodate all, recognizing the growing proportion of vegetarian and/or gluten free members. Attendance was expected to be low, thus the budget for DJ instead of live band. People are missing the local flavor-it is what people remember.

Zack: $5 Fee for Post Plenary Social people are comfortable with it.
Thursday night social: 134 students 164 regulars 55% of attendees are students, 45% regulars.
Music quality/cost continues to be a situation

Discussion of investing in student tickets, if we don't have the money, we can't invest it. People remember the social, not the banquet.

From the Floor: Combine banquet with big social on Friday. A required Awards ceremony earlier on Friday evening. *Pick this discussion backup* at Fall, or monthly, meeting. Consider sponsorships for mixer, social, banquet. Consider outside sponsorships.

F. Tim Atkinson-Finance Committee Report
Not a functional committee. Report is same as Treasurer's report. Could be used for transparency.

BREAK (For lunch at noon)

G. Judy Awong-Taylor- PULSE NSF opportunity
1. Discussion followed.
2. Judy will begin development of planning proposal to NSF. Zack, Bill, Tim and Scott will be included in that initial planning meeting.

H. 2014 meeting –Spartanburg
1. 2014 meeting budget
2. Featured Institutions
Joey: Have host make a flyer for city. List of responsibilities.
3. Volunteers
Scott: Student volunteers.
Zack will not mettle in the volunteers in 2014 or 2015.

4. Field Trips
Make a Field Trip Committee.
Who is in charge, what are the field trip destinations?

Phone conferences May, August, monthly in the Fall.
Mid-May

I. Program Committee Report
2014 meeting Symposium: Educational opportunities at biological field stations. Educational Committee.

J. 2015 meeting- Chattanooga?

K. 2016-??? Concord? But tone down NASCAR
Nashville (Chris, Ashley)
2017 Nashville??? Columbus (GA)???

L. Fall Interim EC meeting 2013
1. Strategic Plan strategy
Moved to phone meeting

M. Other business
Zack will draft a letter for our review.
Discussion followed regarding support and appreciation for our Treasurer, and our Event Planner, whose actions are done on behalf of and with the full knowledge of the EC.

LUNCH BREAK

N. Other business
Judy: Make reports electronic and earlier for review before the meeting.
Don: We did mention about the name of the Eastern Biologist.
The EC believes that the name is not the real crux of the problem.

III. Adjourn
Zack: Motion to adjourn
Bill: Second
Meeting adjourned.

Respectfully submitted,

Sarah Marie Noble, PhD.
Association of Southeastern Biologists Secretary
13 April 2013

INVITED RESEARCH PAPER

Rain-lilies (Amaryllidaceae) of U.S.A. and Mexico

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Rain-lilies are perennial amaryllids, scapose, from black or brown tunicate, ovoid to globose bulbs, sometimes with long neck. The leaves are deciduous or rarely perennial, sessile, erect or recumbent, with overlapping sheathing bases, smooth; blade linear, rarely exceeding 2 cm wide. The scape is hollow and leafless. Inflorescences are umbellate, 1 [--4]-flowered, spathaceous; spathe proximally tubular; bracteoles sometimes present in *Habranthus.* Flowers are erect to declinate; perianth 6-parted, connate basally into a tube 2--16 cm; style filiform; stigma 3-fid, linear (or capitate in some *Zephyranthes*). Fruits are capsular, thin-walled, 3-loculicidal, and globose to 3-lobed, pedicellate or sessile. Seeds numerous, dark brown to black, lustrous, flat, and D-or wedge shaped.

I use the common name rain-lilies because there has long been obfuscation about generic boundaries in the tribe Zephyrantheae. Generic names associated with rain-lilies include: *Agryropsis, Arviela, Atamasco, Cooperia, Habranthus, Haylockia, Mesochloa, Plectronema, Pogonema, Screptranthes, Zephyranthes, and Zephyrites*. The names *Zephyranthes* (including *Cooperia*) *and Habranthus* are currently in use. *Habranthus* has been included in *Zephyranthes* by Bentham and Hooker (1883), Baker (1888), Pax (1888), and Hutchinson (1934, 1959). *Habranthus* and *Zephyranthes* have been treated as a distinct genera by Herbert (1837), Stapf (1927), Sealy (1937), Traub (1952), and Flagg, Smith and Flory (2002a).

Zephyranthes is distinguished from *Habranthus* (Fig. 1) by upright anthers (generally nearly parallel to the filaments) with little curvature, if any. *Habranthus* is distinguished by horizontal anthers (generally perpendicular to the filaments) with usually notable curvature (often lunate) (Flagg, Smith and Meerow, 2010).

DNA studies [Meerow et al., 2000; G.L. Smith and his students (Spurrier and Smith, 2011 and ongoing research)], indicate that (1) *Zephyranthes* is polyphyletic, (2) *Zephyranthes* of SE USA and South America, and *Zephyranthes* of Mexico and SW USA are in different clades and (3) *Zephyranthes* of Mexico and SW USA may be more closely related to *Habranthus* than to *Zephyranthes* of SE USA and South America.

Sometimes it seems as though I have studied rain-lilies my whole life. Actually, I did not see a rain-lily until I was 24-years old, and was being interviewed by Dr. Walter S. Flory, Jr. (deceased, 8 Jun 1998). I was naïve to the professional world of biology. I did not know that I was being interviewed by an eminent biologist, nor did I realize what it meant to be accepted as a student of Professor Flory (Flagg and Smith, 1999). To my great fortune, I became Research Assistant to Dr. Flory in June 1957 at The Blandy Experimental Farm near Boyce, Virginia, and his graduate student at the University of Virginia.

Figure 1. Photographs of *Zephyranthes atamasca* (left) and *Habranthus tubispathus* (right) flowers with insets depicting stylized stamens representative of the genera.

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Dr. Flory, who had a large collection of live amaryllids, taught me how to prepare and make root squashes for chromosome study, and shared insights on the many problems needing study in Amaryllidaceae with my concentration to be on the tribe Zephyrantheae. A year later we published our first joint paper (Flory and Flagg, 1958). This was the beginning of a long and fruitful association with joint authorship of many papers dealing with the Amaryllidaceae (Flory and Flagg,1959, 1961a, 1961b, 1962a, 1962b, 1981; Flagg and Flory, 1961, 1962a, 1962b. 1962c, 1963a, 1963b, 1976a, 1976b; Flory, Phillips and Flagg, 1968; Flagg, Smith and Flory, 1998). Dr. Flory was given the assignment of doing the treatments of *Habranthus* and *Zephyranthes* taxa for Flora of North America project. As Dr. Flory's health declined, Dr. Gerald L. Smith and I assumed major responsibility for these treatments (Flagg, Smith and Flory, 2002a, 2002b).

Important Characters in *Zephyranthes*

Perianth Color. The first character you notice in the field is the color of the perianth. If you notice more than one color in a population of rain-lilies, you probably are seeing more than one taxon (Fig. 2).

Figure 2. *Zephyranthes pulchella* (yellow), *Z. smallii* (pale yellow) and *Z. chlorosolen* (white) in Brownsville, Texas.

The predominant color of the interior of the perianth segments at anthesis is significant in distinguishing rain-lilies. The predominant color may be white or various degrees of red (usually pink) or yellow. Some form of red (usually pink) is often seen in white or yellow species. Generally this secondary red is most intense in the bud, fades through the peak of anthesis, and begins to return during senescence (Fig. 3).

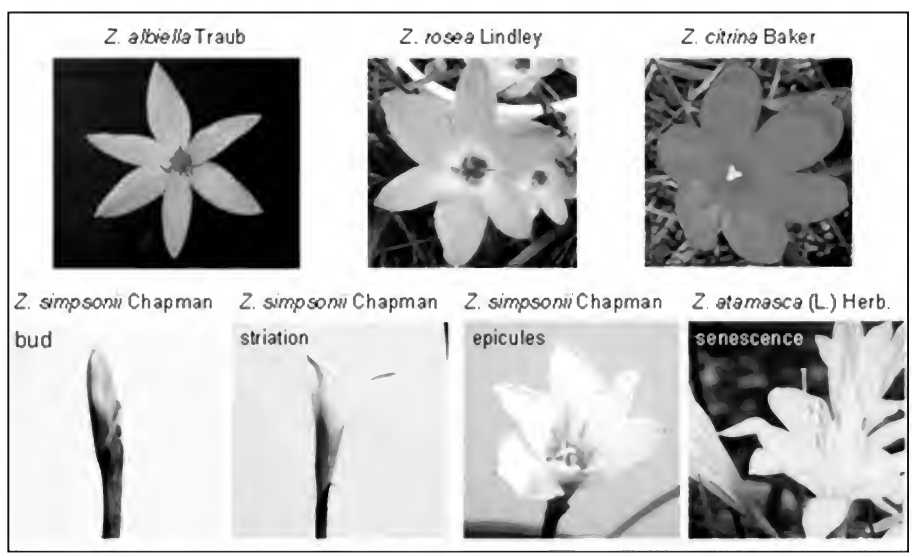

Figure 3. Examples of predominant colors in *Zephyranthes* (top) and secondary red (usually pink) in white-flowered rain-lilies (bottom).

The intensity of the predominant color generally declines with the age of the flower (Fig. 4). While I was at Blandy Farm, Dr. Flory received from Panama a

bulb that produce flowers with pale pink, linear- lanceolate tepals. I thought that this 'Panama pink' might be a hybrid between dark pink *Z. rosea* (2n=24) and white *Z. albiella* (2n=18). As it turned out, 'Panama pink' (*Z.* x *flaggii* Spencer, 1986) is 2n=21, and I duplicated the cross. This variation in color intensity can sometimes make it difficult to interpret notes about color on herbarium specimens.

Figure 4. Examples of changes in intensity of pink with age in *Zephyranthes*.

While vacationing in Costa Rica in 2002, I was ever on the alert for rain-lilies. Finally I saw only one. While crouched down at a farm-house walk to get a close look at a pink rain-lily, I heard my wife asking, "Is that *flaggii*?" Indeed it was (Fig. 5). Two years later Fernandez-A. and Groenendijk (2004) published photographs and a description of what they called *Z. rosea* in Columbia, but by color and tepal shape the plant was without doubt *Z.* x *flaggii*. The authors, unfortunately, did not know *Z. rosea*, and were not aware of Spencer's 1986 publication, nor did they understand the significance of color depth (and often tepal shape) in identifying rain-lilies.

Figure 5. *Zephyranthes* x *flaggii* in pot in North Carolina and in yard in Costa Rica.

Excuse my seeming obsession with *Z.* x *flaggii* and going off subject, but that plant grabbed my attention and taught me so much when I knew it only as 'Panama pink' and saw no reason to give it a scientific name. Here is a sterile hybrid of unknown origin transplanted by humans so that now it is in at least

three countries: Columbia, Panama and Costa Rica. The question would be "How many rain-lilies are now growing far from their areas of origin because people liked them, and how does this fuzz up our understanding of their natural distribution and relationships?"

Flower Structures. Each part of the flower can be important in identifying a taxon. The extremes found in *Zephyranthes* are illustrated in Figure 6. In identifying a rain-lily it is important to note (1) the form of the stigmatic lobes and their location with respect to the anthers, (2) the position of the stamens, spreading or fasciculate, (3) the seating of the ovary (within the spathe or on a pedicel at the top or beyond the spathe), (4) the form of the perianth tube (cylindrical or funnelform), (5) the length of the perianth tube and its relative portion of the perianth, and (6) the length of the filaments and how they compare to the length of the perianth tube.

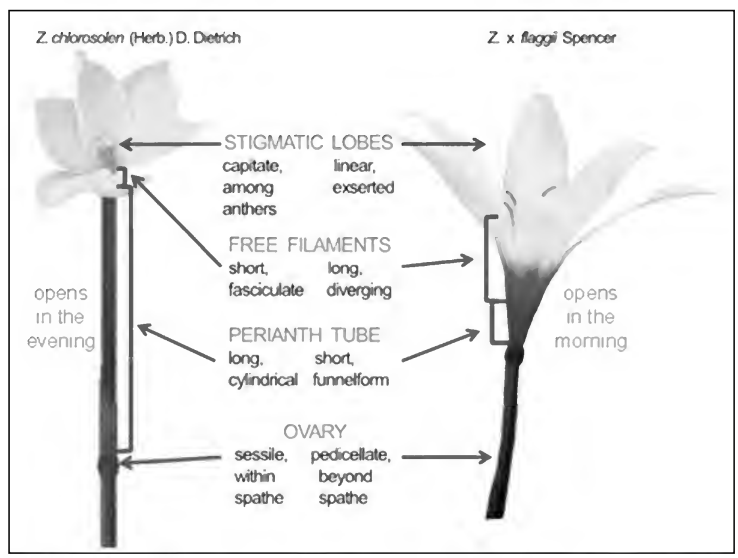

Figure 6. Extremes of floral characters in *Zephyranthes*.

The length of the perianth tube as a portion of the total perianth is directly associated with the expansion of the bud. Rain-lilies with very short perianth tubes open early in the morning. The longer the tube the later in the day the bud opens; taxa with very long tubes open in the evening.

The position of the stigmatic lobes relative to the anther is a strong indicator of a rain-lily's somatic chromosome number. A rain-lily with a well-exserted stigma with rare exception has less than 30 somatic chromosomes. If the stigma is shortly exserted (less than 3mm between the base of the stigma and the top of the anthers), or among or below the anthers, that rain-lily has more than 30 somatic chromosomes.

Texas Gulf Coast

In September 1960 I collected rain-lilies on the Texas gulf coast. All were summer–fall flowering with capitate stigmas among or near the anthers and leaves not wider than the scape. The results are in my doctoral thesis (Flagg, 1961) and were reported to the Virginia Academy of Science (Flagg, 1962), but they were not published until 15 years later (Flagg and Flory, 1976a) when Dr. Flory ultimately agreed with me that *Cooperia* taxa are not generically separate from Texan *Zephyranthes*. Morphology, cytology, physiology, and distribution show that *Z.* (*Cooperia*) *smallii* (Alex.) Traub, *Z.* (*Cooperia*) *jonesii* (Cory) Traub, and *Z. refugiensis* F. B. Jones resulted from hybridizations involving *Z. pulchella* J. G. Smith and *Z. chlorosolen* (Herb.) D. Dietrich [=*C. chlorosolen*] (Fig. 7 and Fig. 8). From left to right in either figure, the perianth yellow becomes less intense to white, the yellow in the pollen pales toward ivory, the pedicel steadily decreases to nothing, the filaments become shorter, the tube gets longer, the stamens shift from spreading to fasciculate, filaments change from acicular to subulate, and bud opening moves progressively from morning to evening.

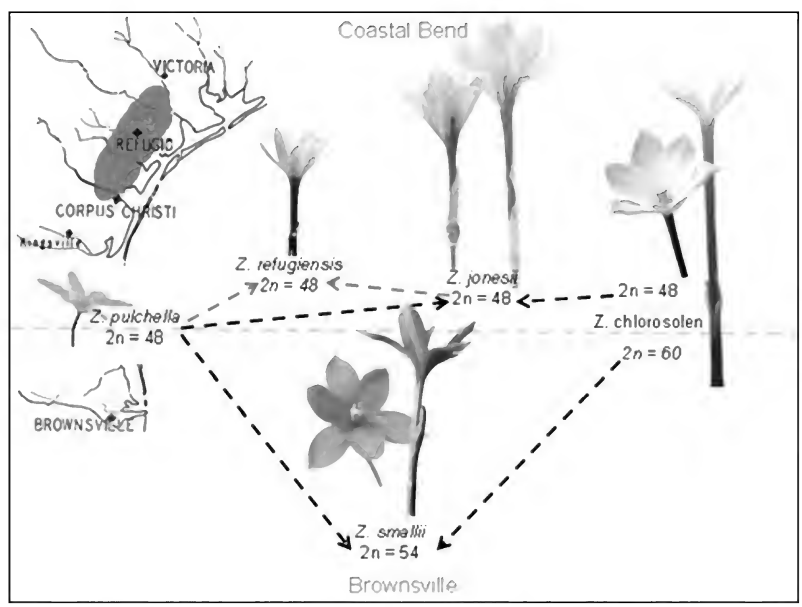

Figure 7. Relationships and distributions of *Zephyranthes* of the Texas Gulf Coast in 1960. *Zephyranthes chlorosolen* and *Z. pulchella* were widely distributed throughout; Z. *smallii* was found only in the Brownsville area; *Z. jonesii* was found in the yellow area and *Z. refugiensis* was found in the gray area within the yellow area. The distribution of these taxa has undoubtedly changed by now.

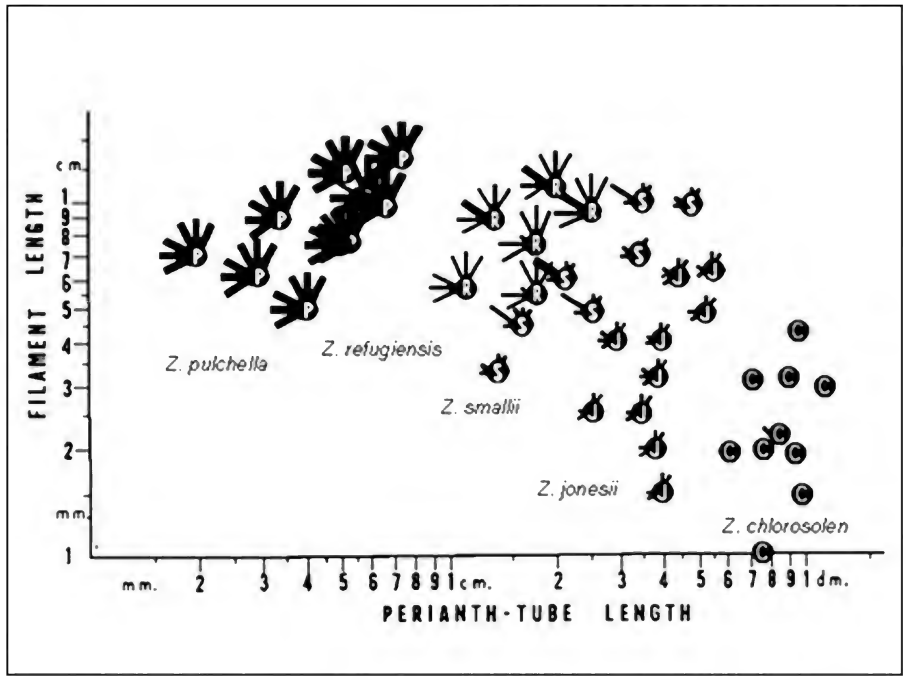

Figure 8. Pictorialized scatter diagram using floral characteristics of Texas gulf coast rain-lilies (Flagg and Flory, Plant Life 1976a) .

Brownsville *Zephyranthes smallii* (2n=54) was found in a few small populations in Brownsville (Fig. 7). It is intermediate in color, structure and opening time between *Z. pulchella* (2n=48) and a race of *Z. chlorosolen* (2n=60), and is clearly a hybrid derivative of the two.

Texas Coastal Bend. *Zephyranthes jonesii* (2n+48) ranged between Victoria and Corpus Christi (yellow area in Fig. 7), and *Z. refugiensis* (2n=48) was found (gray area in Fig. 7) inside the range of *Z. jonesii* near the town of Refugio. All the evidence (Flagg and Flory, 1976) strongly indicates that *Z. jonesii* is a hybrid between *Z. pulchella* (2n=48) and *Z. chlorosolen* (2n=48), and that *Z. refugiensis* (2n-48) is the result of backcrossing between *Z. jonesii* and *Z. pulchella*.

Stability of Hybrid Taxa . *Zephyranthes pulchella* and *Z. chlorosolen* apparently hybridized under natural conditions at least twice. Considerable phenotypic differences between the parental species, associated with polyploidy and the heterogeneity of each, resulted in the their hybrids being quite distinct. Despite some variability, any two of the taxa (*Z. pulchella*, *Z. refugiensis*, *Z. smallii*, *Z. jonesii* and *Z. chlorosolen*) are at least as easily distinguished from each other as are many generally recognized species of rain-lilies. "Specific" boundaries of the five taxa are sustained by polyploidy, apomixis, and strong tendencies toward self and intraspecific fertilization.

Parthenogenesis has been known in polyploid rain-lilies for a century (Pace, 1913; Flory, 1939; Coe 1953). Nevertheless, pollination seems to be required; I

have never seen seed develop in rain-lilies when pollination is prevented, and Coe (1953) reported that unfertilized ovules degenerate before maturity in *Z. drummondii*. It has been well-known among rain-lily breeders that patience is required to obtain hybrids; attempted crosses between polyploid rain-lilies generally result in a great many maternal offspring, and few, if any, hybrids. My conclusion is that many polyploid rain-lilies are facultative apomicts.

Sharing ecological requirements would facilitate cross-pollination, but all five taxa have their stigmas near the anthers (just below or among the anthers, or occasionally exserted a few mm beyond the anthers), which would be conducive to self-pollination. The flowers of the different taxa opening at different times of the day could mitigate against cross-pollination, but this is countered by the flowers remaining open for a few days. With so much time gone by, further evolution of this syngameon (Grant, 1957) may have created additional forms and narrowed the gaps in Figure 8.

Southeastern USA

There are three mesic rain-lilies endemic to southeastern United States (Fig. 9): *Z. atamasca* (L.) Herbert (type species for the genus) (2n=24), *Z. treatiae* S. Watson (2n=24), and *Z. simpsonii* Chapman (2n=48). All three have linear stigmatic lobes, green perianth tubes, and white perianth segments sometimes variously flushed externally with pink. They flower flowering mid-winter to late spring. Simpson's rain-lily has the stigma among or near the anthers; the other two have greatly exserted stigmas. Mature leaves of *Z. atamasca* are usually notably wider than the scape; those of *Z. treatiae* and *Z. simpsonii* are not notably wider than the scape.

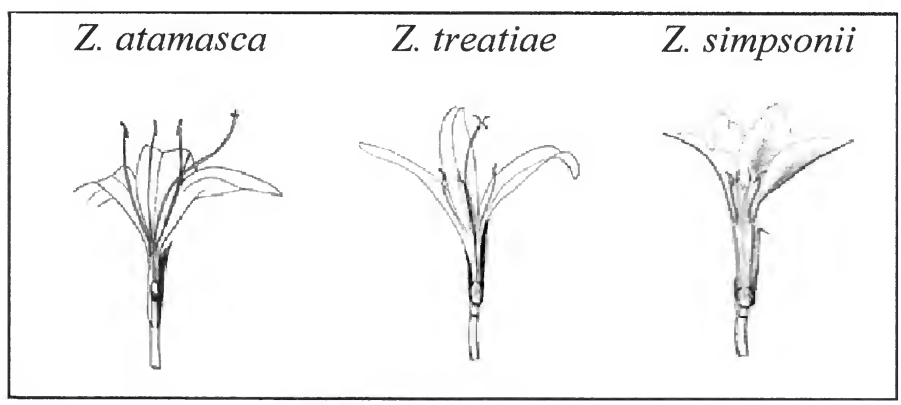

Figure 9. Flowers of *Zephyranthes* endemic to southeastern USA: *Z. atamasca* drawn and *Z. treatiae* drawn by Melanie Darst, *Z. simpsonii* drawn by Jean Putnam Hancock (Flagg and Smith, Castanea 2008a).

I joined Carolina Biological Supply Company in October 1962. While there was little spare time, I continued my interest in rain-lilies--especially scouting those endemic to our southeastern states on trips to and from ASB meetings. At one point I thought that I had found a new *Zephyranthes* species in eastern North Carolina (Flagg, 1980). While the plant was similar to *Z. simpsonii*, there

appeared to be some morphological differences, and it was thought that *Z. simpsonii* occurred only in south Florida except for one disjunct population in Mississippi. Over time I discovered populations of *Z. simpsonii* in Alabama, Georgia, South Carolina, and southeastern North Carolina (Fig. 10), and came to understand that what I thought was a new species fell well within the morphological variation of *Z. simpsonii*.

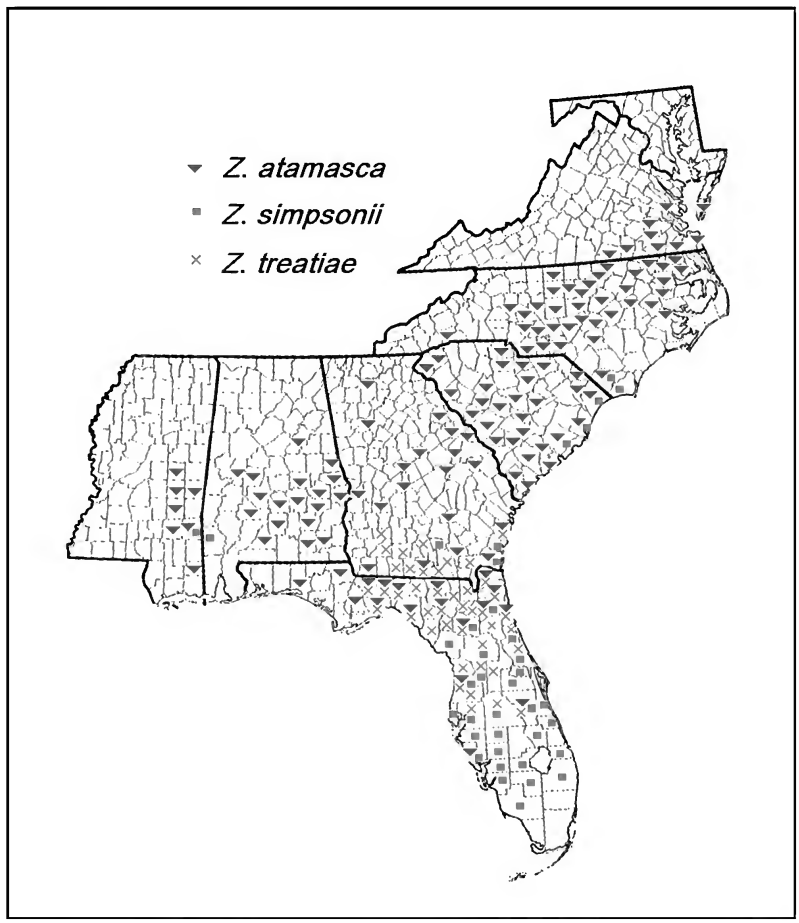

Figure 10. Distribution of *Zephyranthes* species endemic to southeastern USA.

The year after I joined Carolina Biological, Dr. Flory became Babcock Professor of Botany at Wake Forest University, one hour from Burlington by car. I was fortunate that he was so near, and also that for a period of time Dr. Gerald L. Smith was his Research Associate. Notwithstanding a very full teaching load at High Point University, Gerald (HPU Professor of Biology) has maintained much of Dr. Flory's live amaryllid collection at his home greenhouse. I am indeed privileged to have such a dedicated and capable colleague with keen taxonomic insights just a 45-minute drive from my home. Dr. Smith and I began collaborating on rain-lily research in the 1990's.

The first task Gerald Smith and I first undertook was to sort out the relationships of the three endemic southeastern rain-lilies. For several decades some botanists, including Dr. Flory and I, thought that *Z. treatiae* might be an ecological variant of *Z. atamasca*. The two have been traditionally distinguished by their leaves and it was thought that their flowers were not distinguishable. Varietal status was formalized by Alan Meerow: *Z. atamasca* var. *treatiae* (S. Wats.) Meerow (1985).

Dr. Smith thought that the flowers of *Z. atamasca* and *Z. treatiae* were different, and was adamant that we do detailed studies of them (Flagg and Smith, 2001). To shorten a very long story, we took a lot of measurements of the flower parts of all three taxa (Flagg and Smith, 2008a). The flowers of the three species are distinguished by characteristics related, by and large, to the degree of fusion of the perianth into a tube (Fig. 11). In summary, the length of the perianth tube in *Z. atamasca* is less than 1/4 the total perianth length, in Z. treatiae it is at least 1/4 the total perianth length, and in Z. simpsonii it is usually at least I/3 the total perianth length (Flagg and Smith, 2008a).

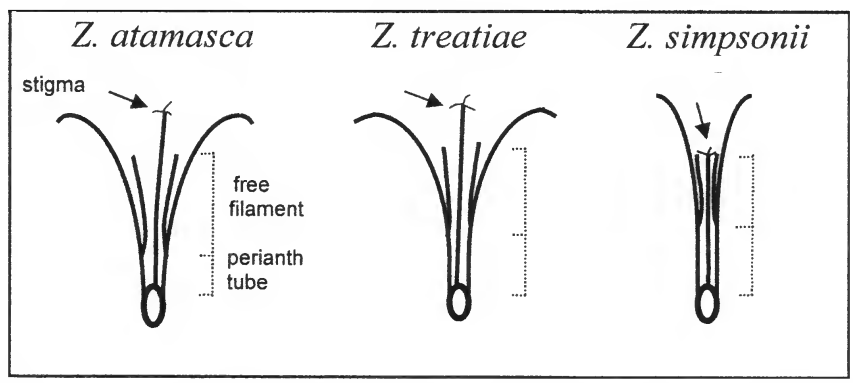

Figure 11. Floral diagrams of *Zephyranthes* species endemic to southeastern USA (Flagg and Smith, Castanea 2008a).

The morphometrics are illustrated in an old-fashion pictorialized scatter diagram (Fig. 12) and a Principal Component Analysis (PCA) (Fig. 13) of flower part lengths. These revealed three distinct species, and indicated that the variation between *Z. atamasca* and *Z. treatiae* is greater than the variation between *Z. treatiae* and *Z. simpsonii*. Publication of DNA fingerprinting Cladograms (Spurrier and Smith, 2011) and ongoing research by Spurrier, Smith and Flagg will cast additional light on these relationships.

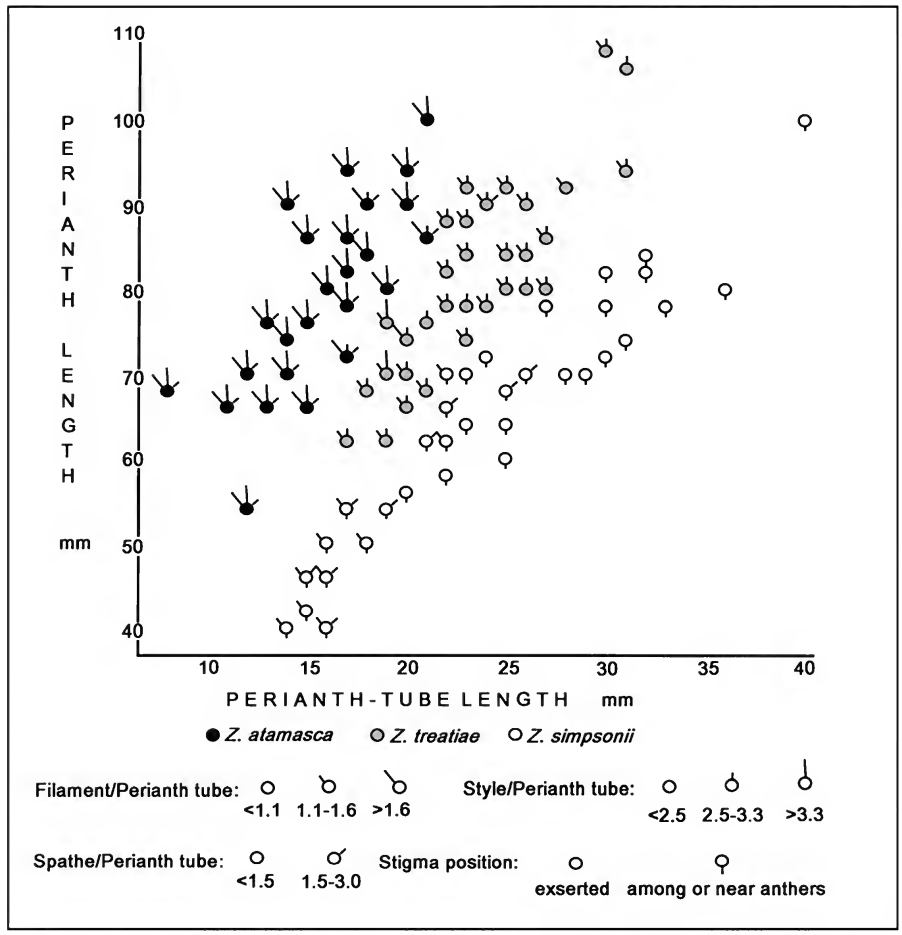

Figure 12. Pictorialized scatter diagram using floral characteristics of *Zephyranthes* species endemic to southeastern USA (Flagg and Smith, Castanea 2008a).

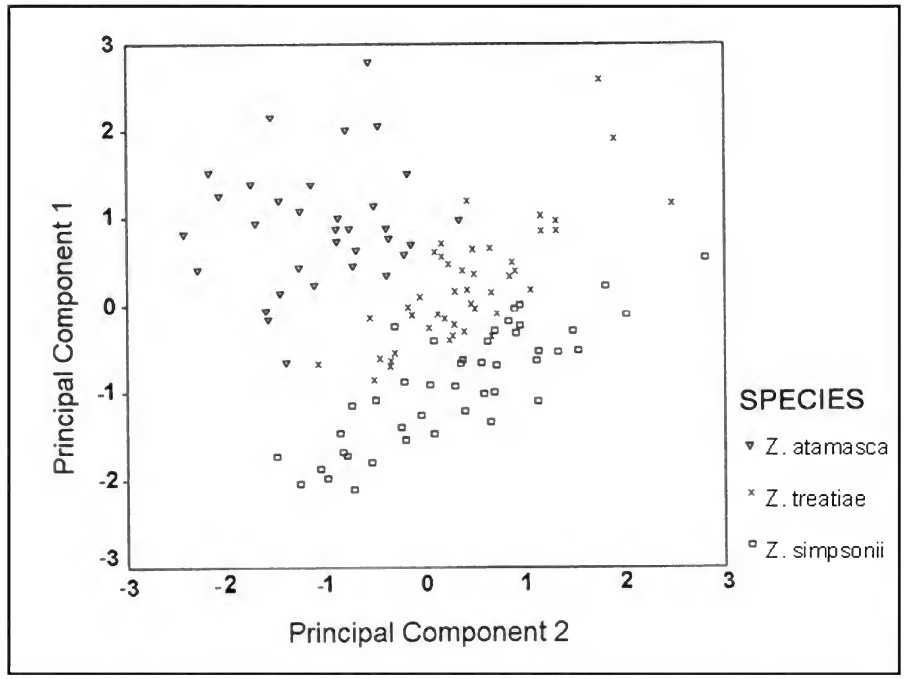

Figure 13. Principal Component Analysis of *Zephyranthes* species endemic to southeastern USA (Flagg and Smith, Castanea 2008a).

Our endeavors led to the same conclusions as Chapman (1892), Small (1933), Hume (1935), Godfrey and Wooten (1979), Clewell (1985) and Wunderlin (1998), that *Z. atamasca*, *Z. treatiae* and *Z. simpsonii* are three distinct species.

Key to Rain-lilies of Continental USA

This over-blown key to *Habranthus* and *Zephyranthes* known in continental USA is presented in lieu of full-blown descriptions, which are available in Flora of North America (Flagg, Smith and Flory. 2002). Since then, there have been two changes to note: *Z. longifolia* Hemsl. (1880) has been renamed *Habranthus longifolius* (Hemsl.) Flagg, Smith and Meerow (2010), and the illegitimate name *Z. grandiflora* Lindl. has been replaced with *Z. carinata* Herb.

1. ***Habranthus*:** Anthers horizontal, perpendicular to filaments, usually recurved.
    2. Perianth segments adaxially pink, 6+ cm; stigma exserted ca. 1 cm beyond anthers; leaf more than 5mm wide; flowering summer-fall; introduced from S. America, locally adventive in Fla..... ***H. robustus***
    2. Perianth segments adaxially yellow, <4 cm; stigma not exserted more than 1 mm and usually among anthers; leaf not more than 4 mm wide.
        3. Perianth segments adaxially bright or orange yellow, sometimes tinged burgundy abaxially; pedicel longer than spathe; summer-fall flowering; Ala., Fla., La., Tex., S. America. ..... ***H. tubispathus***

3. Perianth segments adaxially lemon yellow; pedicel shorter than spathe; spring--summer flowering; sw USA, Mexico. ... ***H. longifolius***

1. ***Zephyranthes:*** Anthers vertical, nearly parallel to filaments, little, if any, curving.
   4. Stigma linear 3-fid; mid-winter--summer flowering.
      5. Stamens diverging; perianth tube funnelform, shorter than style.
         6. Perianth white; anthers not exceeding 8 mm in length; mid-winter--spring flowering; se USA.
            7. Stigma exserted more than 3 mm beyond anthers; perianth tube not exceeding 1/3 total perianth length.
               8. Leaf exceeding 4 mm in width; perianth <1/4 total perianth length. ..... ***Z. atamasca***
               8. Leaf not exceeding 4 mm in width.
                  9. Perianth tube <1/4 total perianth length, tube ca. 1/2 (1/3--2/3) filament length. ..... ***Z. atamasca***
                  9. Perianth tube at least 1/4 total perianth length, tube ca. equal (2/3–1 1/4) to filament length..... ***Z. treatiae***
            7. Stigma very near, among or below anthers; perianth tube length 1/3 or more of total perianth length ..... ***Z. simpsonii***
         6. Perianth pink; anthers exceeding 10 mm in length; spring--summer flowering; introduced, locally naturalized Ala., Fla., La., and Tex; endemic to e Mexico..... ***Z. carinata***
      5. Stamens fasciculate; perianth tube cylindrical, much longer than style; spring--summer flowering; La., Tex., e Mexico; locally naturalized Fla. ..... ***Z. drummondii***
   4. Stigma capitate; summer--fall flowering.
      10. Stamens diverging.
         11. Flowers white; introduced from Argentina, locally naturalized se USA, Tex. ..... ***Z. candida***
         11. Flowers yellow.
            12. Perianth tube length less than filament length, tube usually under 1 cm long.
               13. Stamens distinctly subequal; introduced, locally naturalized Ala., Fla., Miss. ..... ***Z. citrina***
               13. Stamens seemingly equal; Tex., ne Mexico. ***Z. pulchella***
            12. Perianth tube length greater than filament length, tube usually over 1 cm long.
               14. Perianth tube ca. 2x filament length; Texas (Goliad & Refugio Co.) ..... ***Z. refugiensis***
               14. Perianth tube 3–5x filament length; Texas (Cameron Co.)..... ***Z. smallii***
      10. Stamens fasciculate.
         15. Flowers yellow.
            16. Perianth tube length less than spathe length; Texas (Cameron Co.) ..... ***Z. smallii***
            16. Perianth tube length greater than spathe length; Texas coastal bend..... ***Z. jonesii***
         15. Flowers white.
            17. Stigma exserted more than 3 mm; Tex., e Mexico. . ***Z. traubii***

17. Stigma usually among or very near anthers; Ala., Ark., Kans., La., N. Mex., Okla., Tex., e Mexico.....***Z. chlorosolen***

Mexico

The trail to nomenclatural hell is paved with Mexican rain-lilies at both specific and generic levels (Flagg and Smith, 2007)!

If the SW US-Mexican clade is distinct from other *Zephyranthes* and *Habranthus*, that clade would be *Cooperia.* What—apart from DNA and geography— would distinguish *Cooperia* from *Zephyranthes*? Many taxa that would belong in *Cooperia* have cylindrical perianth tubes, and/or filaments shorter than the perianth tube, and/or short, thick stigmatic lobes; however, at this point, some Mexican rain-lilies do not appear to be morphologically separable from *Zephyranthes* of SE USA and South America. It seems prudent to await the results of appropriate of DNA studies of morphologically borderline species, before revising the nomenclature of the *Zephyranthes* of Mexico and SW USA.

In June 1961, I enjoyed collecting amaryllids in Mexico with Dr. Flory and Morris and Kitty Clint. The trip was an adventure and a wonderful opportunity to see many Mexican rain-lilies in their native habitat. Two plants stand out in my mind. First, in the state of Jalisco we found a small, white-flowered rain-lily with very wide leaves; we called it 'Lady-in-Green,' now *Z. latissimafolia* Spencer (1986). Second, imagine the thrill of driving through the village of Mirador in the state of Veracruz, stopping by a water trough surrounded with several large clusters of white-flowered rain-lilies, and realizing that you're digging bulbs at the type locality of a species you had never seen live before--*Cooperia miradorensis* Kraenzl. [*Z. miradorensis* (Kraenzl.) Espejo and Lopez-Ferrari]!

In 2006 Gerald Smith and I set out to complete the annotations of the Mexican rain-lilies that were still remaining to be annotated in our loans for the Flora of North America treatments. Little did we expect that we would make substantial progress in understanding the Mexican taxa. We borrowed the Mexican rain-lily specimens as well as the types of Dr. Thad Howard's new Mexican taxa from the Missouri Botanic Garden. We also acquired a type specimen loan from the Gray Herbarium and type digital loans from British and Paris herbaria to expand our type species concepts. We received a loan in the fall of 2010 from the Mexican National Herbarium, and the herbarium treasures it has offered to us are far beyond our most optimistic expectations. Study resulted in four ASB presentations (Flagg and Smith, 2007, 2008b, 2009c, 2011) and four papers (Flagg and Smith, 2009a, 2009b, 2010; Flagg, Smith and Meerow, 2010) on Mexican rain-lilies.

In digging away at the problems, we have described two new species [*H. tepicensis* Greenm. ex Flagg & G. Lom. Sm. (2009b), and *Z. longituba* Flory ex Flagg & G. Lom. Sm. (2010)], and are working on two more. Four species have been transferred from *Zephyranthes* to *Habranthus* (2010): *H. arenicola* (Brandegee) Flagg, G. Lom. Sm. & Meerow, *H. chichimeca* (T.M. Howard & S. Ogden) Flagg, G. Lom. Sm. & Meerow, *H. conzattii* (Greenm.) Flagg, G. Lom. Sm. & Meerow, and *H. longifolius* (Hemsl.) Flagg, G. Lom. Sm. & Meerow. Some taxonomic problems have been solved while new ones have arisen. We look forward to completing this project.

Acknowledgments

I give special thanks to Ann B. Flagg for her endurance of 56 years of marriage to a daydreamer, and for her loving and patient support, whether she waited in the car while I looked at plants on the roadside, read a book when I went back to the lab at night, took care of the family as I went off in pursuit of rain-lilies for days or weeks at a time, or more recently keeps the home fires burning when I play golf or go to the HPU herbarium to work on rain-lilies. Dr. Gerald L. Smith is particularly recognized for inspiring me to continue playing with frustrating rain-lilies in retirement.

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AWARDS FROM THE AMERICAN SOCIETY OF ICHTHYOLOGISTS AND HERPETOLOGISTS

2013 AWARDEES

Joseph S. Nelson Lifetime Achievement Award in Ichthyology

Presented for an outstanding body of work in any area of ichthyology. Consideration is also given to educational and service impacts of the individual's career. In August 2013 at the annual meeting of the ASIH in Alburquerque, New Mexico, the award was presented to **Gerald R. Smith**, Curator Emeritus of Fishes, Museum of Zoology; Curator Emeritus of Lower Vertebrates, Museum of Paleontology; Professor Emeritus of Ecology and Evolutionary Biology; and Professor Emeritus of Geological Sciences; University of Michigan at Ann Arbor. His research involves the study of fossil fishes.

Robert H. Gibbbs, Jr., Memorial Award

Presented for excellence in systematic ichthyology. In August 2013 at the annual meeting of the ASIH in Alburquerque, New Mexico, the award was presented to **Lynne R. Parenti**, Curator, Smithsonian Institution, Washington, D.C. Her research interests are the systematics, phylogeny, and biogeography of tropical freshwater and coastal marine fishes.

Henry S. Fitch Award

Presented for excellence in herpetology. In August 2013 at the annual meeting of the ASIH in Alburquerque, New Mexico, the award was presented to **Roy W. McDiarmid**, Research Zoologist and Curator of Amphibians and Reptiles, U.S. Geological Survey, Patuxent Wildlife Research Center, Biological Survey Unit, National Museum of Natural History, Washington, D.C. He has spent most of his research career working with the systematics, behavior, ecology, and biogeography of amphibians and reptiles in the neotropcis.

Robert K. Johnson Award

Presented for excellence in service. In August 2013 at the annual meeting of the ASIH in Alburquerque, New Mexico, the award was presented to **Patrick T. Gregory**, Professor of Biology, Department of Biology, University of Victoria, Victoria, B.C., Canada. His research interests have two broad aims: (1) to describe the ecology of amphibians and reptiles especially snakes, and (2) to use these taxa to address issues in population dynamics and life history theory.

Raney Fund Awards

Awards of $1,000.00 were made to each of the following five young ichthyologists in 2013. They are listed alphabetically by surname and by institution.

Michael Burns, Oregon State University
Pablo Declos, Texas A&M University
Kyle Newton, Florida Atlantic University
Alissa Rickborn, Boston University
Tom Stewart, University of Chicago

Gaige Fund Awards

Awards of $500.00 were made to each of the following 10 young herpetologists in 2013. They are listed alphabetically by surname and by institution.

Anna Davis, University of Mississippi
Drew Davis, University of South Dakota
Hillary Edgington, University of Virginia
Shane Hanlon, University of Memphis
Matthew Holding, Ohio State University
Jessie Tanner, University of Minnesota
Rebecca Tarvin, University of Texas
Jennifer Tennessen, Penn State University
Michelle Thompson, Florida International University
Kyle Weichert, California Polytechnic State University

Stoye Awards

Awards for best oral presentations were made to each of the following four students in 2013. Each winner received a cash award of $250.00, a certificate, and all available back issues of *Copeia*. They are listed by name and category.

Russell Ligon, Ecology and Ethology
Anthony Barley, General Herpetology
Milton Tan, General Ichthyology
Ian Macdonald, Development and Morphology

Storer Awards

Awards for best poster presentations were made to each of the following two students in 2013. Each winner received a cash award of $250.00, a certificate, and all available back issues of *Copeia*. They are listed by name and category.

Jairo Arroyave, Ichthyology
Thomas Anderson, Herpetology

Clark Hubbs ASIH Graduate Student Travel Awards for 2013

Herpetology

1. **Brian Robert Lavin**
2. **Abbigail E. Nicholson**
3. **Kristin Winchell**
4. **Abigail J. M. Berkey**
5. **Maggie Hantak**
6. **Elaine Klein**
7. **Nicole L. Smolensky**
8. **Drew R. Davis**
9. **Timothy Clay**

Ichthyology

1. **Luke Etchison**
2. **James C. Cureton, II**
3. **Thaddaeus Buser**
4. **Laura Jackson**
5. **Barbara Sanchez**
6. **Bonnie Ahr**
7. **Aaron D. Geheber**
8. **Jeffrey Zeyl**
9. **Callie Crawford**

International for Herpetology – **Veronica de Barros**
International for Ichthyology – **Slobodian Motta**

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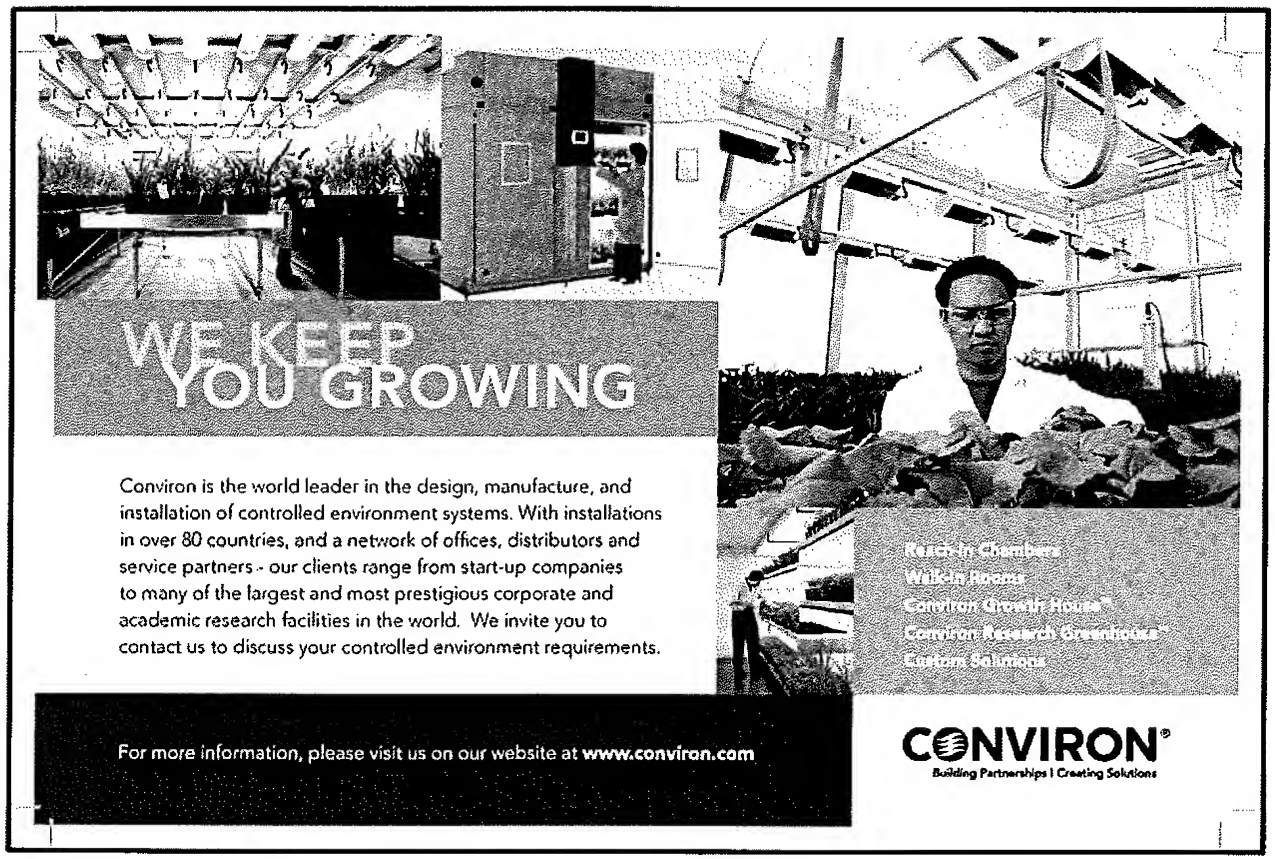
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ABOUT PEOPLE AND PLACES

The Mecoptera Collection of the Florida State Collection of Arthropods: Scorpionflies, Hangingflies, Earwigflies, and Allies

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Mecoptera is a small, "primitive," and poorly-researched order of insects with fewer than 700 known, extant species arranged into 9 families worldwide. Current DNA and anatomical studies suggest they are closely related to fleas (Siphonaptera). Adults and larvae are principally scavengers and/or predators. The Mecoptera Collection at the Florida State Collection of Arthropods (FSCA) in the Doyle Conner Center (Division of Plant Industry, Florida Department of Agriculture and Consumer Services) is adjacent to the University of Florida's McGuire Center for Lepidoptera and Biodiversity and is the largest in the southeastern US. The Collection presently contains 20 drawers of mostly pinned adults, representing more than 4800 specimens. Moreover, FSCA houses and curates McGuire Center mecopteran specimens. Families represented in the Collection include Nannochoristidae, Boreidae (snow scorpionflies or "snow fleas"), Eomeropidae, Meropeidae (earwigflies), Panorpodidae (short-faced scorpionflies), Bittacidae (hangingflies), and Panorpidae (scorpionflies). There are three holotypes (*Panorpa appalachia* Byers 2002; *P. dividilacinia* Bicha 2006; *P. floridana* Byers 1993) and four allotypes (*P. dividilacinia* Bicha 2006; *P. nudiramus* Byers 2002; *P. tecta* Byers 2002; *Neopanorpa similis* Byers 1999) housed in the Collection. Recently, a new species of Nepalese hangingfly, *Bittacus coheri* Bicha, 2011 was described from a donation to the Collection, and we have discovered the first state records for the elusive North American Earwigfly, *Merope tuber*, in the Florida panhandle. Additionally, in 2010 we rediscovered the seemingly rare Florida Scorpionfly, *Panorpa floridana*, in Gold Head Branch Ravine, Florida, based on the beautiful photos of wildlife photographer Stephen Cresswell, taken of the sixth known individual of this

Florida endemic. These photographs were vouchered as hardcopy prints in the McGuire Center and FSCA, the electronic digital versions were vouchered with MorphoBank (http://www.morphobank.org/permalink/?P876), and the study published in 2013. Moreover, FSCA houses all three of the only known specimens of Say's Hangingfly, *Bittacus stigmaterus*, from Florida and the only known specimen of the Oconee Scorpionfly, *Panorpa oconee*, discovered in Florida. Although FSCA contains a worldwide collection of mecopterans from five continents—Europe, North and South America, Asia, and Australia—there is a significant representation of specimens from Florida and the Great Smokey Mountains of Tennessee and North Carolina. To date, 22 publications by a variety of authors have been generated from the Collection between the years 2005 and 2013.

Donations and gifted specimens from 2004 through 2013, representing the families Boreidae, Meropeidae, Panorpodidae, Bittacidae and Panorpidae, have expanded the Collection by more than 1000 additional specimens (http://www.fsca-dpi.org/OverviewFrame.htm). Important recent donors and collectors include David T. Almquist, Wesley J. Bicha, William L. Grogan, Jr., John B. Heppner, Peter W. Kovarik, Craig M. Brabant, Edward Coher, David P. Cowan, Bruce A. Harrison, Joshua R. Jones, Joseph E. Eger, John M. Leavengood, Jr., William Mauffrey, Howard Romack, Scott R. Shaw, Zell Smith, Paul E. Skelley, Lionel A. Stange, Gary J. Steck, Bruce D. Sutton, Nadeer N. Youssef, James R. Wiley, Allan Wills; and the late entomologists Alistair S. Ramsdale, Charles Porter, and Howard V. Weems, Jr. Additionally, important meropeids were gifted to FSCA from the Virginia Museum of Natural History, the National Museum of Natural History (Smithsonian Institution), and the McGuire Center. We are fortunate to have received all donated and gifted mecopterans and encourage others to contribute to this important southeastern collection.

We are currently conducting research on hypothetically primitive mecopteran species, such as *Merope tuber* and the Australian Earwigfly, *Austromerope poultoni*. This involves actively obtaining new *M. tuber* distributional records, biogeographical information, and life history data. The Collection currently holds over 300 adult *M. tuber* specimens from 16 states located throughout eastern North America.

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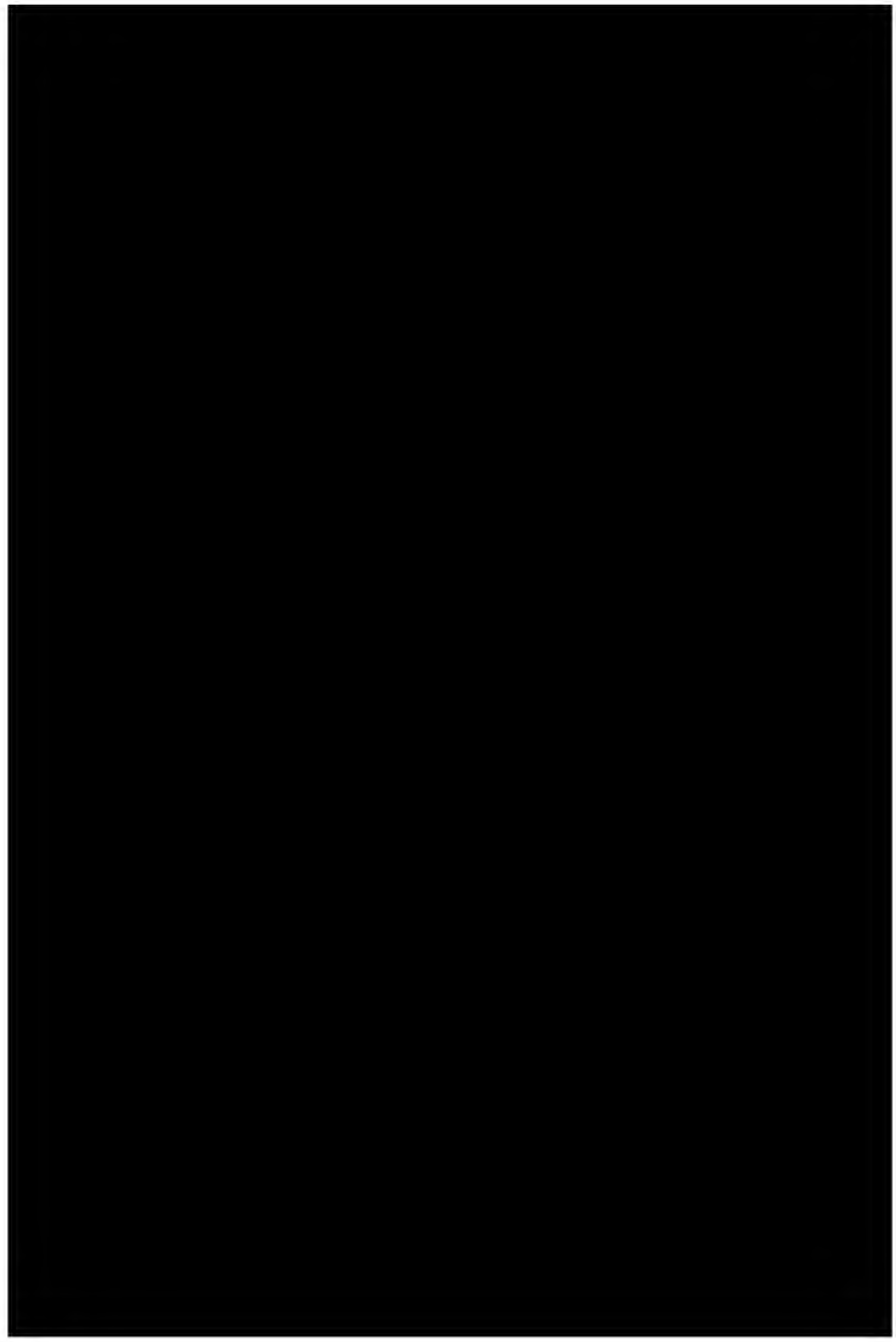
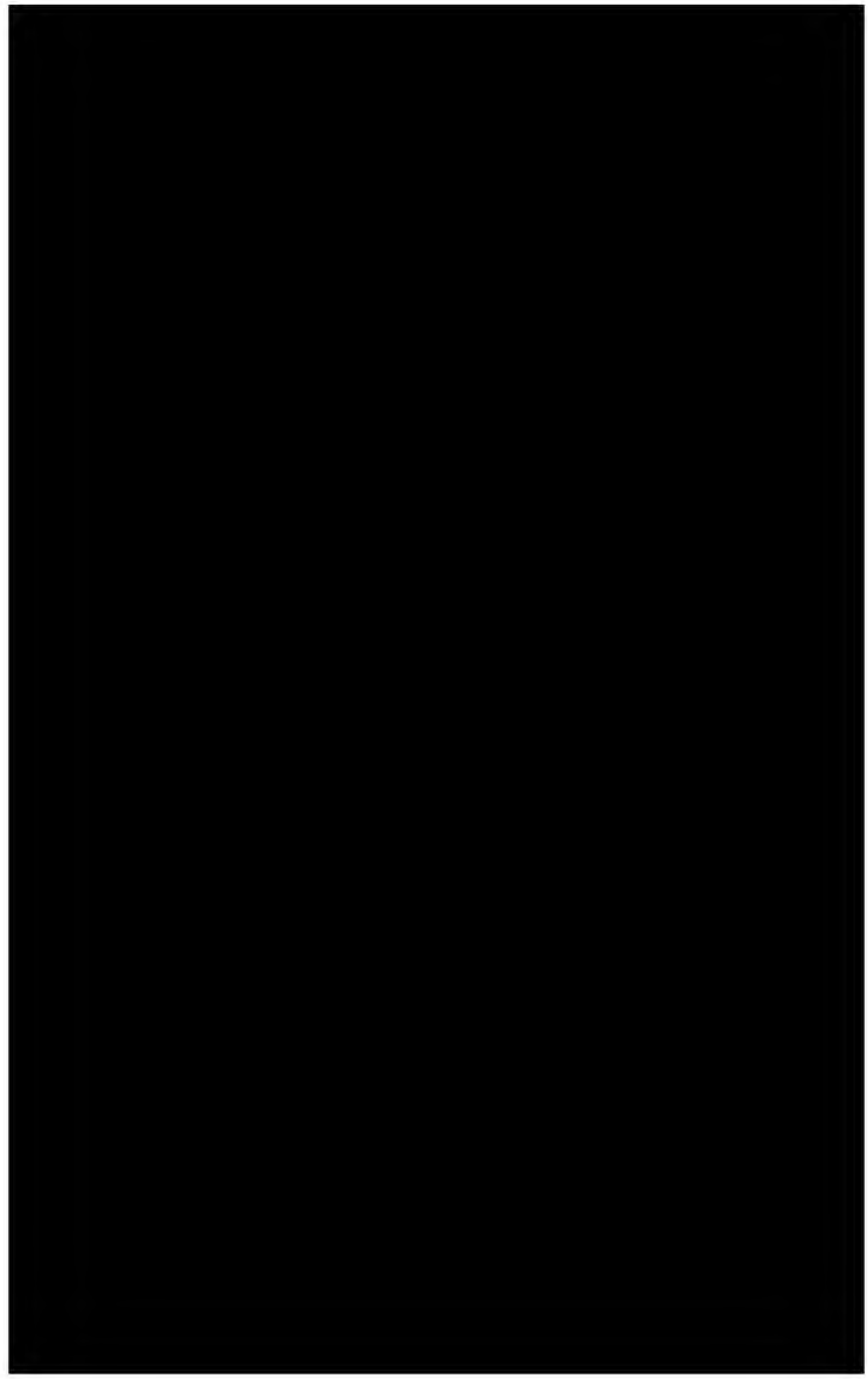
Research Associates, Florida State Collection of Arthropods

[Fig. 1] North American Earwigfly, *Merope tuber*, Male, Tall Timbers Research Station, Florida. (Photo by James C. Dunford.)

[Fig. 2] Red Scorpionfly, *Panorpa rufa*, Male, Apalachicola Bluffs and Ravines Preserve, Florida. (Photo by David T. Almquist, Florida Natural Areas Inventory.)

[Fig. 3] Florida Scorpionfly, *Panorpa floridana*, Male, Gold Head Branch, Florida. (Photo by Stephen Cresswell.)





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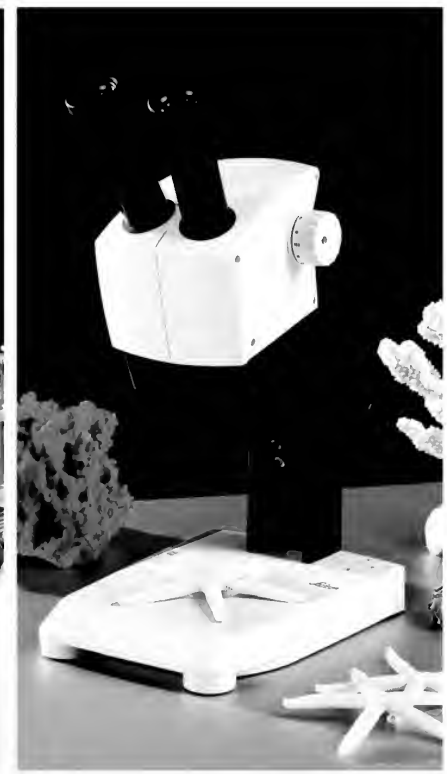

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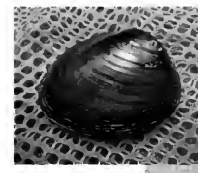

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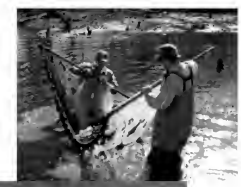

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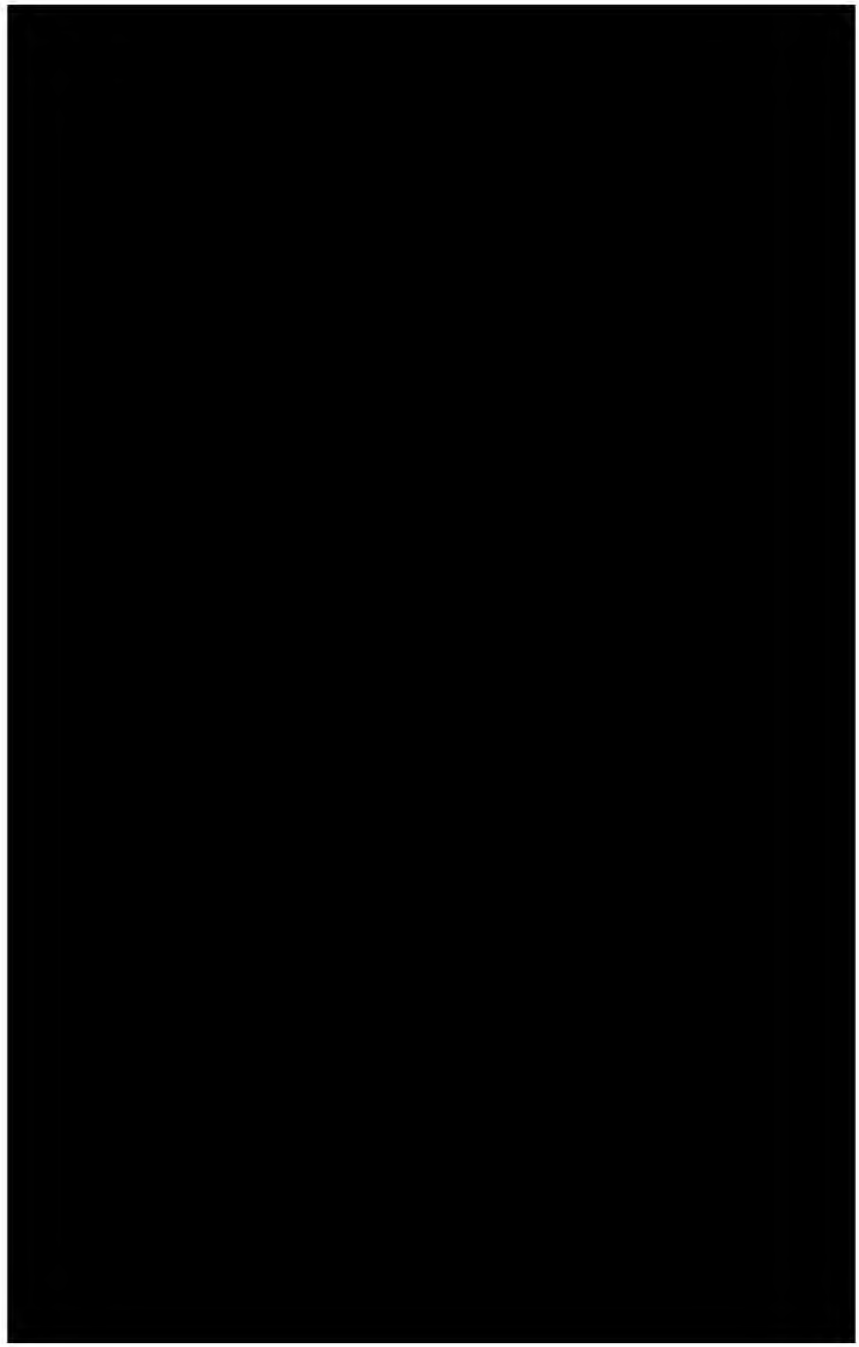

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